REVISED TENTATIVE AGENDA STATE WATER CONTROL BOARD MEETING THURSDAY, DECEMBER 9, 2010, FRIDAY, DECEMBER 10, 2010 (If Necessary)

Senate Room B General Assembly Building 9th & Broad Streets
Richmond, Virginia

	THURSDAY, DECEMBER 9, 2010 - CONVENE - 9:30 A	A.M.		
I.	Minutes (September 27-28, 2010)		TAB A	
II.	Permits Appalachian Power Company, Claytor Hydroelectric Project, VV Synagro Central LLC. – Fauquier County, VPA Permit	P DEF Stuart	ERRED C	
III.	Final Regulations General VPDES Permit for Seafood Processing Facilities General VPDES Permit for Domestic Sewage Discharges Less Than or Equal to 1,000 Gallons per Day WQMP Regulation - Frederick-Winchester Service Authority Opequon WTF Emergency Rulemaking - Water Quality Standards Regulation To Include the October 2007, September 2008 and May 2010 Chesapeake Bay Criteria Assessment Protocols Addenda	Cosby Cosby Pollock Pollock	D E F G	
IV.	Approval of 11 TMDL Reports and 3 TMDL Modifications: South River benthic TMDL, located in Augusta and Rockingham Countie; South River, South Fork Shenandoah River, and Shenandoah River Mercury TMDLs, located in Augusta, Rockingham, Page, and Warren Counties; Spout Run benthic TMDL, located in Clarke County; Strait Creek and West Strait Creek benthic TMDLs, located in Highland County; Smith Creek benthic TMDL modification; Jackson River benthic TMDL, located in Alleghany, Bath, and Highland Counties; Little Calfpasture River benthic TMDL, located in Rockbridge County; Roanoke River PCB TMDL, located in Montgomery, Roanoke, Bedford, Campbell, Charlotte, Pittsylvania, and Halifax Counties; , modification for Twittys Creek benthic TMD; Middle Fork Holston River, located in Washington and Smyth Counties; Wolf Creek benthic TMDL, located in Washington County; modification for UT Hurricane Branch benthic TMDL; Pettit Branch benthic TMDL, located in Accomack County; and Mill Creek Dissolved Oxygen TMDL, located in Northampton County; and Water Quality Management Planning Regulation amendments: 9 VAC 25-720-50 - Potomac – Shenandoah River Basin, 9 VAC 25-720-60.A - James River Basin; 9 VAC 25-720-80.A - Roanoke River Basin; 9 VAC 25-720-90.A - Tennessee – Big Sandy River Basin; 9 VAC 25-720-110.A - Chesapeake Bay-Small Coastal Basin (adds 48 TMDLs); and Notification of Upcoming Delegated Approvals			

V.

Significant Noncompliance Report

I

O'Connell

VI. O'Connell **Consent Special Orders (VPA Permit Program)** J Northern Regional Office Loudoun County Sanitation Authority (Courtland Rural Village Water Reclamation Facility VII. **Consent Special Orders (VPDES Permit Program)** O'Connell K Blue Ridge Regional Office B&J Enterprises L.C. (Montgomery Co.) Town of Clifton Forge (Alleghany Co.) Dare to Care Charities, Inc. (Botetourt Co.) Town of Kenbridge STP (Lunenburg Co.) Northern Regional Office Town of Culpeper (Culpeper Co.) Piedmont Regional Office Greensville County Water & Sewer Authority Henrico County City of Richmond Tidewater Regional Office Branscome, Inc. (Accomack Co.) Carrollton Used Auto Parts, Inc. (Isle of Wight Co.) Valley Regional Office Harrisonburg-Rockingham Sewer Authority -North River WWTP **VIII.** Consent Special Orders (VWP Permit Program) O'Connell L Central Office Bandy, LLC (Floyd Co.) Northern Regional Office Glenhaven South Subdivision/Winchester Homes, Inc. (Spotsylvania Co.) IX. **Consent Special Orders (AST, UST & Others)** O'Connell M Piedmont Regional Office Getty Petroleum Marketing, Inc. (Richmond) Henrico County 911 Training Center Lucky's Convenience Stores, Inc. (Richmond) Tidewater Regional Office American Marine Groups, Inc. (Norfolk) X. **Formal Proceeding Decision** James River Petroleum Williams N XI. **Public Forum** XII. **Other Business** Gills O FY2011 Revolving Loan Fund Division Director's Report Gilinsky **Future Meetings** FRIDAY, DECEMBER 10, 2010 - CONVENE - 9:30 A.M. (If Necessary)

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions arising as to the latest status of the agenda should be directed to the staff contact listed below.

PUBLIC COMMENTS AT <u>STATE WATER CONTROL BOARD</u> MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for its consideration.

For <u>REGULATORY ACTIONS</u> (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department of Environmental Quality and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For <u>CASE DECISIONS</u> (issuance and amendment of permits), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft permit for a period of 30 days. If a public hearing is held, there is an additional comment period, usually 45 days, during which the public hearing is held.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

CASE DECISIONS: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of the decision. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then allow others who commented during the public comment period (i.e., those who commented at the public hearing or during the public comment period) up to 3 minutes to respond to the summary of the prior public comment period presented to the Board. No public comment is allowed on case decisions when a FORMAL HEARING is being held.

POOLING MINUTES: Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

NEW INFORMATION will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances, new information may become

available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. In the case of a regulatory action, should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda, pending regulatory actions or pending case decisions. Those wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

<u>Department of Environmental Quality Staff Contact:</u> Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; fax (804) 698-4346; e-mail: cindy.berndt@deq.virginia.gov.

VWP Draft Permit No. 09-0892, Appalachian Power Company, Claytor Hydroelectric Project, Pulaski and Montgomery Counties: The Claytor Hydroelectric Project is an existing licensed hydropower facility located on the Claytor dam on the New River in Pulaski and Montgomery Counties, Virginia. The permittee, Appalachian Power Company (Appalachian) is re-applying for its Federal Energy Regulatory Commission (FERC) license, which expires June 30, 2011. The permittee holds an existing Section 401 Water Quality Certificate (no number assigned), which upon expiration or forfeiture of a FERC license, becomes null and void. As part of the FERC licensing requirements, a license applicant must apply for state water quality certification, and thus, DEQ received a Joint Permit Application on June 29, 2009. Regardless of the federal action, the proposed activities fall under the regulatory authority of the State Water Control Law and Virginia Water Protection Permit Regulation. The Claytor Project consists of a concrete gravity dam, gated spillway, intake, powerhouse, switching equipment and appurtenant facilities, and a reservoir. The total generating capacity is 75 megawatts (MW), and the total hydraulic capacity is 10,000 cubic feet per second (cfs). The mean flow through the development is 3,413 cfs. The reservoir impounds water a distance of approximately 21.67 miles. The surface area of the lake is 4,360 acres at full pond (1846.0 feet NGVD) and has approximately 100 miles of shoreline. As part of the application for a new FERC license, Appalachian is proposing a number of management and monitoring plans to protect, enhance, and mitigate for various issues related to Project operations. These plans will be incorporated into the FERC license, as approved by the FERC. DEQ and pertinent state agencies participated in several work groups for the purposes of assisting Appalachian in preparing its application for a FERC license during 2008 and 2009, and were involved in developing and reviewing many of these plans. At least three of the plans pertain directly to this VWP permit application: the Water Management Plan, the Water Quality Monitoring Plan, and the Freshwater Mussel Adaptive Monitoring Plan. The Water Management Plan provides a description of current operations and sets forth the permittee's proposal for operating the project in the future and meeting instream flow requirements in this VWP permit and those pending in the FERC license. The Water Quality Monitoring *Plan* outlines how the permittee proposes to mitigate the low dissolved oxygen conditions observed in the tailrace of the Claytor Project during the Water Quality Study completed for relicensing and how they will monitor the proposed mitigation to ensure dissolved oxygen levels remain above water quality standards in the tailrace. This plan further proposes to mitigate for low dissolved oxygen conditions by

utilizing an existing deicing bubbler system located on the dam trash racks, and if this does not resolve the issue, the permittee offers to explore other means to increase dissolved oxygen conditions. The Freshwater Mussel Adaptive Monitoring Plan proposes to compile baseline data regarding mussel distribution and abundance in order to identify sites appropriate for long-term monitoring; evaluate longterm trends in mussel fauna downstream of the project, including species richness, abundance, growth and recruitment; and evaluate the potential influence of project releases on mussel fauna downstream of the project, with particular focus on water temperature and dissolved oxygen conditions. As part of the application review process, DEO contacted all appropriate state regulatory agencies on September 21, 2009 per §62.1-44.15:20.C. Additionally, follow up discussions were held with the Virginia Department of Game and Inland Fisheries in February and March 2010. Agency comments were given full consideration to address the balance of instream and offstream uses in the VWP individual permit Part I -Special Conditions, particularly regarding the elimination of the annual drawdown, which both DGIF and DCR commented on in letters dated November 5, 2009 and November 2, 2009, respectively. The applicant responded on April 15 and May 20, 2010 with comments on the draft permit regarding the permit term; requirements for action on the Eastern Hellbender salamander; copying DEO on studies, reports, modeling, etc.; impediments to movement by aquatic species; mussel fauna monitoring locations; requirements on its operations; and flow conditions. DEQ revised several special conditions and further discussed Appalachian's concerns during a conference call on June 4, 2010. The public notice for the draft permit was published in the Roanoke Times (Roanoke) and the Southwest Times (Pulaski) on June 20, 2010; and in the News Messenger/Radford News Journal (Christiansburg) and Wytheville Enterprise (Wytheville) on June 23, 2010. A public hearing was held at Pulaski County High School in Pulaski, Virginia on October 14, 2010 at 7:00 p.m. Mr. Shelton Miles served as the Hearing Officer, and DEQ staff present included Brenda Winn, Scott Kudlas, and Mike McLeod. All but the applicant opposed the elimination of the annual drawdown of Claytor Lake. The applicant opposed the permit term and reissuance process and the flow release in February and March in the draft VWP permit. Approximately seven additional written comments and approximately 839 signatures on a petition were received by the close of the comment period on October 29, 2010.

Issue: Elimination in draft permit of voluntary annual lake level drawdown by Appalachian Comments from various citizens and shoreline owners:

- Drawdown is used to perform essential maintenance, cleanup and stabilization along the Claytor Lake shoreline; enables us to protect our properties, and to ensure our continued access, enjoyment and safety at Claytor Lake.
- Without drawdown, residents will be unable to perform needed shoreline activities; our properties
 will decline in condition and value, and our ability to access, and safely enjoy Claytor Lake will
 suffer.
- The water quality and mussels that DEQ is trying to protect will also be negatively affected because we will be unable to protect shorelines against erosion.
- By installing erosion control, we have also helped prevent sedimentation and contaminants from going into the lake, thus protecting water quality and aquatic habitat, including for mussels. We have also helped decrease infilling of the lake and the creation of low-water boating hazards by controlling erosion.
- Believe that a less than 5 foot "normal" drawdown can be accomplished without a negative impact to the fish wildlife and mussels.
- The environmental benefits of continued draw-down more than offset the potential impact on the total mussel population along New River.
- Measures that would be much easier, and less costly to accomplish, than if we were restricted to perform all work from the land side (or by boat). According to a survey of landowners done as part of the Recreation Study for AEP's relicensure application, seventy- five percent of landowners use drawdown for shoreline maintenance, debris clean-up and shoreline stabilization. One of the recommendations of the Study was that drawdown be continued (Recreation Assessment Study: Final Report, Claytor Project, FERC No. 739, The Louis Berger Group, Inc., December 2008).

- I am not aware of any other way to make these repairs.
- My rather large concrete wall I built in 1971, 1974, and 2000, has begun to be undercut by wave action and my yard is now being washed away. The only method of adequate repair is to dig a new foundation footer under and in front of the wall (150 feet long). This cannot be accomplished without at least a 3 foot drawdown.
- The amount of revenue for local contractors, hardware stores, and concrete companies is significant during the drawdown. This provides an economic "shot in the arm" for the local economy while providing a method for folks to save a little money rather than hiring the "only" piledriver on the lake! Most of us cannot afford a \$30,000+ dock!! We can afford a few thousand dollars of materials and fix it ourselves, or hire other contactors while supporting "competitive" practices.
- Property owners have come to "rely" and "expect" by "continued practice of" the annual drawdown. The practice of drawdown has in fact enhanced the property values around the lakefront and it has been used as a "selling" advantage. ... The conscious decision to discontinue the drawdown of Claytor Lake by AEP will be a conscious decision by AEP to REDUCE property values on the lakefront and promote anticompetitive practices. There could possibly be legal issues raised concerning this.
- It appears that since the drawdowns have stopped by AEP you cannot get to the wood on the bottom to clean it out and as a result it is piling up creating a safety issue for watercraft.
- We are witnessing significant outbreaks of hydrilla infestation in the lake. One of the primary remediation and control means for this nuisance weed is periodic drawdown in the fall. Without the drawdown that kills the weed and allows physical removal, we fear that hydrilla will overwhelm the lake and cause deterioration of the precious shallow sections of the lake, impacts on watercraft and lake enjoyment, a buildup of organic matter in the lake, and/or reliance on expensive chemical remediation that many of us would like to avoid for environmental reasons.
- Our shoreline needs the drawdown in order to maintain the sea walls; otherwise over time they will fall into major disrepair and fall into the lake. This is very serious. My wife and I have spent over \$100,000.00 to build the wall and we want to be able to maintain it properly.
- The only reason cited in the relicensing application is for the mussel population which is not substantiated by biological facts or reason.
- Request a hearing to develop alternatives to allow for continued drawdown, including:
 - o changing the timing, depth and frequency of drawdown
 - o require Appalachian to mitigate for mussel losses and promote mussel populations through propagation and further study to look at the impacts of a smaller than 5 foot drawdown
 - o Mitigations can include adding the lake to the Mussel Monitoring Plan, facilitating shoreline erosion control through the Shoreline Management Plan, and funding propagation of mussels at nearby facilities.
 - o I would like to suggest a compromise of drawing down the water every other year or every two years.
- Our family is committed to protecting natural resources and want to impress upon you the
 importance of the drawdown. We participate in many agricultural best management and
 conservation practices and programs to help control erosion and water quality degradation. We
 have been able to stabilize much of our shoreline thanks to the drawdown, and have been able to
 afford it with help from cost-share and grant programs.
- Accretion of sediment has resulted in the development of shoals, limiting navigation in the lake. Shoal development appears to be related to the drawdown, which de-waters and compacts the shoals, maintaining the water depth over them. Drawdown is also cited as an effective means to control invasive aquatic plants. Drawdown in the fall and winter would not appreciably harm reproductive biology of the pistolgrip, since it is a short-term brooder that spawns in mid-March to May and releases juvenile hatchlings in mid-April to June.

- Clearly there is no question that mussels die as a result of drawdown. My point here is that there are inconsistencies and uncertainties in the estimates of mussels affected, including the state-threatened pistolgrip mussel. Appalachian states that low mobility species such as mussels do not tend to inhabit the first two feet below the reservoir's full pond (1844-1846 NGVD) because of the frequency of water level fluctuations. If this is true, then only the area exposed by the remaining three vertical feet of a five-foot drawdown should be used in calculating mussel mortality. If this is not true, then mussels are potentially being killed in the course of Appalachian's water level management. Because peaking operations begin in late fall, stranded mussels can be subjected to freezing temperatures. Mussels can also be stranded during drawdowns for flood control, and for other emergency and nonemergency drawdowns for which Appalachian reserves the right in its proposed Water Management Plan. Moving drawdown forward to October from November and December would continue to avoid fish spawning periods and avoid mussel mortality due to freezing temperatures.
- Using Appalachian's statement in Volume I of its Final License Application that 55 MWh equals 0.02% of its annual generation, I have calculated that 792 MWh represents 0.288% of its annual generation. In consideration of the benefit to human and natural resources of the maintenance activities performed during drawdown, I feel this is not a significantly large amount of power to lose, or to have to generate elsewhere.
- I see the damage to the mussels around our cove when the lake is down. This is just a bad and unnecessary idea. Repairs can be made without this draw-down. I also support the new regulations for the repair and replacement of sea walls.

<u>New River Planning District Commission</u>: Over the past few years, water levels have not been lowered and Pulaski County would urge this practice to be reinstituted annually.

Skyline Soil and Water Conservation District:

- Our concern with the draft permit is its requirement that drawdown be discontinued for the purposes of shoreline cleanup, structure maintenance, and stabilization. SWCD acknowledges the need to minimize negative impacts on fish and wildlife resources, including the state-threatened pistolgrip mussel, and also acknowledges the need for a balanced management strategy that affects the best outcome for all impacted resources. ... By participating in these activities, property owners assist in reducing soil erosion and preserving water quality within and downstream of Claytor Lake. ... Aquatic habitats, including that for the pistolgrip, benefit from the installation of erosion control measures as a result of drawdown. SWCD is concerned that the elimination of drawdown will make it too difficult and/or costly for landowners to conduct shoreline cleanup, maintenance, and stabilization activities. ... Sedimentation will endanger aquatic life, including smothering mussels and reducing dissolved oxygen for fish.
- SWCD requests that DEQ develop a comprehensive management plan that allows for the balanced protection of all impacted resources. SWCD recommends that periodic drawdowns be allowed to continue with mitigations required of the licensee. The mitigations should include expanding Appalachian's proposed Freshwater Mussel Adaptive Monitoring Plan to include the study of mussels within the lake reservoir, funding by Appalachian of mussel propagation at nearby facilities, and facilitation of shoreline erosion control through the Shoreline Management Plan. Modifications to the frequency, duration, depth or timing of drawdown could also be made to lessen the impact on aquatic resources.
- Please consider that wind and boat wakes are the primary causes of erosion of up to 1.5 feet per year along 11 miles shoreline consisting of highly erodible soils. Installation of erosion control measures is enhanced by drawdown, particularly when installing riprap revetments due to the need for key-weight trenching at the toe and sides. There is a potential for incorrect installation if alternate methods, such as barge access is used. Barge use for riprap installation can cost \$100 to \$150 per foot versus direct shoreline access costs of approximately \$20 to \$30 per foot.

Delegate Dave Nutter, House 7th District:

• I am deeply concerned that this proposal will have far reaching consequences to the Claytor Lake community. The proposed rule change will likely have significant impact on the lake's water

- quality, aquatic habitat, safety and property conditions and values if adopted. While I realize that you are in period of public comment, I am confident that the majority of residents of Claytor Lake are unaware of the scope of this proposed rule change.
- Elimination of the drawdown will have consequences on the economic vitality of the community and constitutes a breach of trust to citizens considering the historic partnership between it and the applicant.
- Appalachian should support the public good, and support for the elimination of drawdown appears to be more about money than it is the mussels.

<u>Citizens of the Lake (Delegate Anne B. Crockett-Stark, House 6th District)</u>: Development of lake represents long-term commitment by all parties involved for mutual benefits. Mussels must be balanced with people's needs and financial needs of area. Please work together for future health of all those concerned.

Pulaski County:

- We are concerned with item 6 in the Department of Environmental Quality's draft permit requiring that Appalachian Power discontinue the periodic reduction of lake levels (drawdown). Residents have historically used drawdowns to perform essential maintenance, cleanup and stabilization along the Claytor Lake shoreline practice has contributed immeasurably to the water quality for both recreational purposes as well as the preservation of important habitat for species such as the state-threatened pistolgrip mussel (Tritogonia verrucosa).
- Were it not for the drawdowns, the ability to maintain shorelines clean-up the lake and otherwise care for the shoreline would be significantly impaired. ... land slopes steeply to the water's edge. These factors make it difficult and sometimes impossible for equipment and personnel to access the shoreline. A periodic drawdown allows equipment and personnel to access the water front and travel to otherwise inaccessible areas along the land area exposed by the drawdown.
- Full investigation of the following alternatives is respectfully requested: 1. Institution of shorter drawdown periods, 2. variation in the levels to which the lake elevation is reduced, 3. Moving the drawdown period to a different time of the year to avoid freezing weather, 4. Scheduling reductions in lake levels for every two or three years rather than annually, 5. Implementation of citizen efforts to encourage the growth of pistol grip and other mussel species through culturing and other methods such as are being tried in reintroducing oysters in the Chesapeake Bay, and other means of improving mussel habitat, 6. Propagation of mussels funded by AEP at local facilities, 7. Inclusion of the reservoir in AEP's proposed Freshwater Mussel Monitoring Plan, and 8. Consideration of the impact of unchecked erosion on mussel populations.
- Board of Supervisors requests that DEQ do whatever is necessary to encourage and support efforts by local lake residents in addressing erosion and other maintenance, recreation and water quality concerns at Claytor Lake.
- Discontinuing drawdown is very likely to result in a decline in water quality and other environmental conditions affecting both recreational use and the unique habitat Claytor Lake currently provides for mussel and other aquatic species.
- The drawdown is an issue of personal safety to workers performing shoreline maintenance, as well as to residents trying to cleanup debris and trash from shoreline structures. Lower lake levels provide for a safer environment in which to do this work, whereas higher lake levels create a potential for drowning more so than when lake is drawn down, and also prevents observation of dangerous debris.
- The Pulaski Board of Supervisors is interested in being involved with any discussions to resolve the drawdown issue.
- The board maintains a program for litter control that supports efforts made by land owners to keep properties clean, including those efforts conducted during the annual drawdown. In some cases, particularly where riprap revetments are in place, prohibiting access for shoreline cleanup is in direct conflict with the board's litter control efforts.

Friends of Claytor Lake (FOCL):

- FOCL supports the continuation of regular drawdowns for shoreline maintenance with mitigations for impacts to natural resources.
- There are approximately 1,200 lake front property owners with assessed property totaling almost \$430 million. The Louis Berger Group conducted a survey of property owners in 2008 and found that 75% use the drawdown time to remove trash and debris, stabilize shorelines, and maintain shoreline structures. They recommend the drawdown continue.
- FERC stated in its August 2010 Draft Environmental Assessment that while the elimination of the drawdown would benefit mussels, it would negatively affect land owners. FERC recommended that Appalachian provide property owners with an advanced-notice schedule of its own anticipated maintenance drawdowns.
- Drawdown enables stakeholders throughout the lake community to assist with clean up. It also enables property owners to install and maintain erosion control structures. Due to steepness in terrain and vegetation, many owners cannot access the shoreline for stabilization work without the drawdown. Working from the water is not an option for many due to the increased cost. Erosion control also protects against destruction of riparian vegetation, thus benefiting wildlife, water filtration, and aesthetic quality of the lake.
- Eliminating the drawdown appears to conflict with Part II.I of the draft permit regarding authorization of injury or invasion of personal property.
- Part I.D.6 of the draft permit is a single strategy approach based on limited and inconsistent information, such as abundance and distribution of mussels and the percentage or number of individuals impacted by drawdown.
- Other impacts to lake mussels may include sedimentation, dissolved oxygen, temperature, contaminants, invasive vegetation, and non-native mussel species. Further study is clearly needed.
- A more comprehensive approach than discontinuing drawdown is needed to balance impacts, which could include: expanding the Freshwater Mussel Adaptive Management Plan to assess lake mussel populations and impacts; propagating mussels; determine specific land owner needs to develop a strategy; developing and monitoring conservation measures that allow drawdown

American Electric Power d.b.a. Appalachian Power Company:

- Agree with the permit condition to eliminate drawdown due to results of mussel studies that show impacts, particularly to the state-threatened pistolgrip mussel.
- While recognizing that the elimination of an annual drawdown is a change in operations, this is no longer common and has been discontinued at other AEP facilities.
- Maintenance and repair of shoreline structures can still occur successfully.
- The drawdown results in loss of power generation by a renewable resource, causing generating by other means such as combustible coal, which leads to negative environmental impacts and increased generation costs.

<u>Virginia Department of Game and Inland Fisheries (DGIF)</u>: DGIF is concerned about the potential impact to aquatic species (particularly the state threatened pistolgrip mussel); however, if the State Water Control Board decides in favor of continuing drawdowns, a mitigation/compensation plan may need to be developed. We are willing to work with the regulatory agencies and other stakeholders to develop this plan. Some of the issues that have been discussed internally in regards to developing recommendations for a mitigation plan to minimize impacts include the following:

- O The drawdown could possibly be moved to a period when freezing temperatures are not an issue. However, there are tradeoffs with recreational fishing, fish spawning, and boating. Therefore, the 1st week of November time frame may be the best option.
- o Decreasing the intensity of drawdowns from 5 feet to 3 feet will reduce the area exposed, possibly reducing the number of mussels impacted and shortening the refill period.
- o Decreasing the length of the drawdown from 14 days to 9 days.
- o Decreasing the frequency of drawdowns from every year to every two years.
- O Stakeholder and applicant involvement and responsibility for returning some exposed mussels to the lake during drawdown.

- o Continuing to monitor mussels during the drawdown.
- O Determining a phase-out date to end drawdowns, possibly based on continuing mussel monitoring and input from stakeholders, etc.
- o Propagating the pistolgrip mussel in an appropriate facility.
- o Researching and securing the funding necessary to conduct several of our recommendations.

Staff Response:

The Department of Environmental Quality has no regulatory authority to require Appalachian to lower the level of Claytor Lake for the purposes of accommodating shoreline maintenance or stabilization activities. Following the recommendation received by the Virginia Departments of Game and Inland Fisheries and Conservation and Recreation, a condition was developed in the draft Virginia Water Protection (VWP) permit that prohibits the drawdown of Claytor Lake, which Appalachian Power Company (Appalachian) has historically implemented annually to allow shoreline owners to make dock repairs, clean up debris, and/or stabilize the shoreline. The basis of the condition is to protect the pistolgrip mussel, a state threatened species, which has been documented in Claytor Lake. Supporting the basis are the Code of Virginia and Virginia Administrative Code; existing studies and reports from 2005 to 2008; and recommendations received from state resource agencies from 2006 to date. The applicable laws and regulations focus on protection of beneficial uses, protection of state-listed threatened and endangered species, and balancing these protections. Beneficial uses include, but are not limited to protection of fish and wildlife habitat; maintenance of waste assimilation; recreation; navigation; cultural and aesthetic values; domestic (including public water supply); agricultural; electric power generation; commercial, and industrial uses. See 62.1-44.2; 62.1-44.15:20; 62.1-44.5; 62.1-44.6; 29.1-563; 29.1-564; 29.1-568; 9VAC25-210-10, -50, and -230; and 4VAC15-20-140.

Based on additional comments and recommendations received as a result of the public hearing, staff understands that there is a potential to mitigate documented impacts to the state-threatened pistolgrip mussel and better balance protection of beneficial uses in the lake through the coordinated efforts of the applicant and interested stakeholders, under the leadership of state resource agencies. Therefore, staff recommends that the draft VWP permit be revised to include: 1) the development of a mitigation plan that would address the comments and concerns received by DEQ; 2) a provision that requires the permittee to provide reasonable notice to shoreline owners, at a minimum, when project maintenance activities are planned that require the reservoir to be lowered, so that owners may take advantage of this time to conduct private shoreline projects; and 3) coordinating with the Department of Game and Inland Fisheries to develop one or more demonstration projects on alternative stabilization techniques that may be less dependent upon reservoir levels.

Appalachian has suggested that alternative methods of making shoreline and structure repairs and conducting periodic maintenance that have been implemented at other AEP hydropower facilities, including Smith Mountain and Leesville Lakes be implemented at Claytor. DEQ strongly encourages Appalachian to implement a coordination program with residential and commercial shoreline owners and operators, either by creating a new work group or committee or by utilizing an existing work group or committee, for the purposes of: educating the public on available methodologies to make repairs or conduct maintenance; providing a process for owners to voice comments and concerns; developing a multi-tiered public notification and coordination process; developing management strategies acceptable to Appalachian and owners/operators; and partnering with stakeholders on measures and opportunities to reduce or minimize the introduction of debris and trash into Claytor Lake.

Regulation of erosion and sediment control falls under the authority of the Virginia Department of Conservation and Recreation. Once soils and other materials enter a surface water as a result of some man-induced activity or events of nature (i.e., hurricanes), DEQ may then have the regulatory authority to address the materials as fill in a surface water, based on the particular circumstances at the time. Any Virginia Water Protection permit attempts to protect surface waters from unauthorized fill and discharges, backflooding, and excavation, as well as protect water quality under established standards (see 9VAC25-260). DEQ recommends that Appalachian engage interested stakeholders in discussion about measures to reduce or prevent erosion and sediment control around Claytor Lake, not only by

armoring shoreline but also with alternative methods of stabilization; ways to reduce both project and recreational affects on shoreline stabilization; and ways to reduce erosion from land owner activities, such as agriculture and landscaping.

Staff suggest that Appalachian provide the public with educational materials regarding how power is generated by the Claytor project; how Appalachian's power rates are determined; what effects Appalachian's power rates; and how Appalachian's customers can help conserve energy.

Issue: Instream flows required in the draft permit

American Electric Power d.b.a. Appalachian Power Company: Appalachian stated its position relative to loss of revenue as well as loss of renewable power resulting from the higher flows proposed by VDEQ. Appalachian's reasoning was based also on the results of studies performed to address this issue as part of the relicensing effort for the Claytor Project and the fact that the minimum flows were to occur during winter months when the impact to the downstream environment including recreation use would be minimal. In addition, Appalachian stated that the benefits to the downstream environment resulting from the flow changes recommended by VDEQ in lieu of those proposed by Appalachian would not offset the loss of renewable energy that would result. ... the 417 MWH of renewable energy to be lost annually in order to meet the VDEQ's recommendations would most likely be replaced by a blend of combined cycle and combustion generating facilities The replacement energy would have associated discharges of CO2, SO2, and NOx, while the cost to customers would be at a higher rate. ... the implications of the edicts of VDEQ in the related Section 401 Certification need to be weighed relative to overall impact on and benefit to the Commonwealth...Therefore, Appalachian still believes that its proposal for minimum flows of 1,000 cfs during the months of February and March during the term of the new license for the Claytor Project represents the best overall option.

New River Outdoor Company:

- The New River is recognized as the number one smallmouth river in the country, and provides huge tourism dollars for Giles County and the New River Valley in the form of fishing and recreating ALL season long.
- The recreational release period is still up to AEP even if it is defined. It is very difficult to guide during the summer months when you are running at @1000 cfs, and then there is a mention of a thunderstorm, and out of nowhere the river jumps to 3500 cfs. It negatively affects my anglers who have spent big bucks to come from ALL 50 states, and it is dangerous to wading anglers who do not expect it. I have reported these rises to the VDGIF all summer long. AEP needs a more stringent requirement in their releases during the recreational period.
- There needs to be a better way of notifying user groups below the dam of unexpected releases. A notification in fine print on their website or a news release is not good enough. We are too busy to sort through their website to find this stuff, and it is NOT consistent. An automated email list would help greatly, and a requirement as to when they have to send it is crucial.
- The recreational period should include March at the very least. We begin our guiding season as do many others for pre-spawn smallmouth in March.
- The minimal inflow during non-recreational period needs to be higher than the 750-1200 cfs included in the draft. It is very difficult to guide before April 15th (Now 4/1) and after October 15th (Now 11/30) with these tremendous rises that bring grass, snot grass, trees, etc.
- Get rid of the squirt boat competition in May during the middle of the spawn. I have observed it knocking spawning males off of their beds and have reported this to the VDGIF numerous times.
- This draft [does not do] anything different but increase the dates a little and add a little MIF during colder months.

Virginia Department of Game and Inland Fisheries (DGIF):

• DGIF has concerns about the language in the draft permit as it pertains to modified levelized flow in the late summer/early fall period. We recommend revising the language in "Table 1: Minimum Instream Flow (MIF) Requirements" to include a seven-day average inflow as a basis for modified levelized. We emphasized in our November 2009 letter that the intent of modified levelized flow would be to create flows in the lower end of the acceptable range for whitewater

boaters and powerboat-based anglers, as defined in the New River Flows and Recreation Study final report. Powerboat-based anglers would benefit most from these flows particularly in the Whitethorne and Radford Arsenal portions of the New River. We recommend these higher weekend minimum flows be timed so that flows would be in this vicinity of the river during daylight hours.

• Winter minimum flows should be increased to more naturally mimic the long-term hydrograph. Higher minimum winter flows during peaking (December 1 through March 31) should provide better base flows for aquatic species based upon the IFIM studies completed. This should also limit stranding of anglers, recreational boaters, and waterfowl hunters. Recently, winter and early spring fishing has increased dramatically with the improving muskie fishery. Powerboat-based navigation would be enhanced in the Whitethorne/Radford Arsenal area of the New River with higher minimum flows during peaking.

Friends of the New River:

- Levelized flow operation of the facility from April 1 through Nov. 30 is specified in the draft permit, and this is consistent with VDGIF's recommendation, but how is this consistent with "bringing a unit or units into operation" with specified ramping up (15 min.) and down (30 min.)? The latter language (in Part 1 D.2.) seems to countenance peaking operations during the levelized flow period.
- VDGIF requested clarification of licensee's rationale for a minimum instream flow of 1000 cfs for December through March, instead of VDGIF's proposed 1250 in December and January and 1500 in February and March. AEP did not provide clarification, but rather simply repeated the assertions that VDGIF questioned. What is DEQ's rationale for adopting the licensee's flow recommendation here rather than that of VDGIF, when the licensee has refused to address VDGIF's questions and concerns? Besides a lack of transparency regarding the method by which Appalachian arrived at a cost figure for the higher minimum flows, there is no attempt in Appalachian's license application to demonstrate that the (easily quantified) foregone hydropower benefits outweigh the value of public benefits such as a healthy biota.

Staff Response:

DEQ staff participated in the Water Management Work Group convened by Appalachian for the purposes of its Federal Energy Regulatory Commission (FERC) license application. Staff from the Virginia Departments of Games and Inland Fisheries (DGIF) and Conservation and Recreation (DCR) also participated. The goal of that work group was to review the current Appalachian operations and their impact on stream flow in the New River and make recommendations to Appalachian for changes to its operations under the new FERC license term. DEQ, DGIF, and DCR focused on improving flows, and thus improving protection of beneficial uses. DEQ proposed specific recommendations regarding an approach termed 'modified levelized flow', to occur in the late summer/early fall, to improve flow for recreational uses. Staff intended for this to be an experimental mode of operation to determine if additional flows could be provided without significant impact on power generation capabilities. The draft VWP permit contains flow release requirements per VWP regulation that also include optional modes of operation to implement the experimental plan. However, the language in the draft permit condition was unclear to several commenters. Therefore, staff recommends the revision of Table 1 in the draft VWP permit to clarify the optional nature of this release plan..

Another aspect of Appalachian's operations regarding stream flow is the seasonal switch from a levelized mode to a peaking mode. The Water Management Work Group made recommendations to Appalachian about seasonal flows, specifically those during the winter months. Appalachian decided not to accept those recommendations in its proposals submitted for its FERC license application. DEQ received comments from state resource agencies during the public comment period that provided alternate flow recommendations from those proposed by Appalachian. DGIF contends that winter minimum flows should be increased to more naturally mimic the long-term hydrograph of the New River, based upon the In-stream Flow Incremental Method studies completed to date. Appalachian contends that a loss of revenue and a loss of renewable power would result from the flows proposed by VDEQ (lost renewable energy would most likely be replaced by a blend of combined cycle and combustion generating facilities),

and that its proposal of 1,000 cfs, or inflow, whichever is less is appropriate based upon studies conducted as part of its FERC relicensing effort. To fully consider the recommendations made specifically by DGIF, DEQ staff conducted in-stream flow modeling to determine what if any compromise could be reached. The February and March limits set forth in the draft permit are a compromise between those proposed by Appalachian (1,000 cfs, or inflow, whichever is less) and those proposed by DGIF (1,500 cfs, or inflow, whichever is less), and was validated by DEQ's modeling efforts as protective of beneficial uses. Therefore, no changes to the draft VWP permit are recommended regarding the flow requirements in Table 1 for the months of December through March.

To further address concerns expressed by the Board Chairman during the public hearing process, staff propose to revise the permit conditions to require the permittee coordinate with state agencies and interested stakeholders during periods of extreme low inflow to the Claytor project in order to develop operational protocols for flow release at these times.

Issue: Permit term and reissuance process/requirement

American Electric Power d.b.a. Appalachian Power Company:

- Appalachian stated that a VWP permit with a termination within the term of the license for the Claytor Project would be inconsistent not only with the new license term but with the scheme of regulation contemplated by Section 401 (a)(1) of the Clean Water Act (CWA). Appalachian also showed examples for hydroelectric projects in the Commonwealth that recently received licenses from FERC and that VDEQ had issued VWP permits with language similar to that contained within the draft permit for the Claytor Project whereby FERC had upon review determined that any termination of the certification during the license term would end the conditions of the certification but would have no effect on the validity of the FERC license. In other cases, FERC added that the certification requirement of Section 401 (a)(1) only applies to the granting of a license by a federal agency and that once the license is granted, the state water quality certification agency no longer possesses authority to issue a certification for the project covered by the license. ... The VWP permit for Appalachian's Smith Mountain Project has no requirements for Appalachian to reapply for and obtain new certifications during the term of the FERC license. Therefore, understanding the statutory constraint on VDEQ, Appalachian firmly believes that for the Claytor Project only the first sentence of the first paragraph of Special Condition B should be retained and the remainder of that paragraph should be deleted so that the conditions of Special Condition B parallel the language contained within VDEO's Section 401 (a)(1) certification for the Smith Mountain Project...
- The 15-year permit term should be vacated and instead run concurrent with FERC license term. Same language as was used in the Smith Mountain Project permit should be used for this permit.

 Friends of the New River: We are concerned that VDEQ will not be able to enforce the permit conditions past 15 years. ... According to Appalachian Power, FERC claims further that licensee would not be required to seek another VWP before the end of the FERC license period.

Staff Response:

The condition providing for the permit term and reissuance procedures is in accordance with the State Water Control Law. Notably, § 62.1-44.15 authorizes the Board to adopt rules governing the issuance of water quality permits and further authorizes such rules to be more restrictive than federal requirements. Statutory duration requirements include that the term of the permit be based on the projected duration of the project, the length of any required monitoring, or other project operations or permit conditions; however, the term of any permit shall not exceed fifteen years. Further, the term of these permits shall not be extended by modification beyond the maximum duration. Extension of permits for the same activity beyond the maximum duration specified in the original permit requires reapplication and reissuance of a permit. Reissuance cannot extend the 15-year term of the original or subsequent issuances. No changes to the draft VWP permit are recommended regarding permit term or reissuance procedures.

Issue: Recreational access

<u>New River Planning District Commission</u>: The New River has a Blueway Trail that extends from the headwaters to its terminus; currently no route exists around the Claytor Hydro project. A portage around the facility would provide a way to remain on the trail in a safe manner.

Staff Response:

DEQ has no authority to require portage around the Claytor Lake dam to enhance recreational opportunities to the public. No changes to the draft VWP permit are recommended regarding recreational access.

Issue: Impacts to downstream aquatic resources

<u>Friends of the New River</u>: We are concerned about possible adverse impacts on the Hellbender (*Cryptobranchus alleghensis*) which inhabits the New River system and which seems to be on its way to being designated a special status organism. ... The language of the draft permit leaves it entirely to chance whether the Hellbender is studied at all. Licensee should be required to provide for studies on the status of the Hellbender in the project area (downstream of Claytor Dam to the backwaters of Bluestone Lake). ... the permit is not clear with respect to the licensee's obligations if it is determined that project operations are detrimental to the Hellbender. ... We would urge that the permit substitute "shall" for "may" in the preceding sentence and in similar circumstances in the permit. ... the draft permit is silent as to the process by which the licensee might be required to amend its project operations in the event they are found to be detrimental to the Hellbender or other biota.

Staff Response:

VWP staff did not include any special conditions in the draft VWP permit that are specifically related to the Hellbender salamander, identified by DGIF as a potential inhabitant downstream of the dam for the following reasons: it is not a listed threatened or endangered species; the Virginia Department of Game and Inland Fisheries did not provide DEQ with specific comments or recommendations regarding potential studies for the species; and unlike with the freshwater mussels, Federal Energy Regulatory Commission (FERC) coordination did not identify a potential connection between project operations and the salamander populations and/or habitat. However, the draft VWP permit does contain conditions to protect all instream beneficial uses and water quality, per the Code of Virginia §§62.1-44.2; -44.5; -44.15:20; and -44.15:22. Should the project be found to impact any aquatic species as a result of the ongoing studies and coordination, DEQ will determine what if any permit modifications are necessary and/or if mitigation for such impacts is appropriate. Also, a permit condition was included in the draft VWP permit that specifically addresses the potential to reopen the permit should impacts be found or should the species listing status change. Staff does not recommend any changes to the draft VWP permit regarding the Hellbender salamander.

Issue: Administrative management

Friends of the New River:

- The draft permit refers to a Water Quality/Water Management Technical Review Committee. Is this the same committee referred to in Permit Condition 1 as an "adaptive management committee"? Who decides who will sit on this committee? The composition of the Committee should be specified. What response will be required of the licensee to any recommendations affecting project operation that may be made by the Committee?
- The permit should make clear that the licensee be financially responsible for the mussel studies described under E.5 regarding the mussel monitoring plan.
- VDGIF and FONR both have repeatedly expressed concerns (see for example DGIF comments on the license application, signed by William Kittrell and dated November 24, 2009) over funding for studies, decision-making, and the role of the Committee with respect to management decisions, and AEP has consistently been unresponsive, addressing the concerns in only the vaguest language. The VWPP should specifically address these issues (the composition, schedule, funding, rules of order, and role of the Committee and the obligations of the licensee in recording and reporting deliberations/decisions of the Committee as well as implementing its recommendations). A process for resolving disputes between the Committee and the licensee should also be specified.

Staff Response:

The use of technical work groups or committees is a tool used by applicants to gather public information and comments, technical expertise, and data on a wide array of topics that must be addressed in the process of applying for a Federal Energy Regulatory Commission (FERC) license, and is also used as a tool for the application for a Virginia Water Protection (VWP) permit. Such bodies are optional in the VWP permit process unless specifically required by a permit. Participants usually include interested stakeholders; local, state, and/or federal agency personnel with jurisdiction and expertise over the topic(s) to be discussed; and the applicant or licensee. The purpose is to gain consensus on any identified issues, while understanding the inherent authority limitations and practicability of any resolutions derived by the group. Such groups may themselves provide human or financial resources to assist in developing resolutions, or may provide references to other bodies or programs for assistance. Leadership of such work groups or committees depends on the tasks the group is charged with, but typically resides with the governmental authority(ies), particularly when permitting or licensing is necessary. Staff recommends the incorporation of a work group to address the issues associated with the annual lake level drawdown.

Staff Recommendations: Based on the review of the permit application and subsequent submittals from the permittee and/or the permittee's agents, the staff provides the following recommendations: 1) the permit has been prepared in conformance with all applicable statutes, regulations and agency practices; 2) the proposed activity is consistent with the provisions of the Clean Water Act and State Water Control Law and will protect instream beneficial uses; 3) the proposed permit addresses avoidance and minimization of surface water impacts to the maximum extent practicable; 4) the effect of the proposed activities, together with other existing or proposed impacts to surface waters, will not cause or contribute to significant impairment of state waters or fish and wildlife resources; and 5) this permit is designed to prevent unpermitted impacts. The staff recommends that the Board find the above recommendations to be appropriate; approve the VWP individual permit and conditions; and authorize the Director to issue VWP Individual Permit Number 09-0892 as approved by the Board.

Issuance of VPA Permit No. VPA00062 – Synagro Central LLC. – Fauquier County: Synagro Central LLC. submitted a Virginia Pollution Abatement (VPA) permit application for the land application and routine storage of Biosolids. The Permit application included 6633.3 acres on 26 farms; 21 of the 26 farms are currently permitted under Virginia Department of Health (VDH), Biosolids Use Regulation (BUR) No. 51 and are currently eligible for land application. The permit also included a storage lagoon located at the C.L. Ritchie Farm which is currently permitted under VDH-BUR Number 68. Notice for this proposed permit action was published in the *Fauquier Times Democrat* on April 28 and May 5, 2010. The public notice comment period ended on May 27, 2010. The public hearing was held at 7:15 p.m. on September 13, 2010, at the auditorium of Liberty High School in Bealeton, VA. Mr. Shelton Miles served as hearing officer. An interactive informational session preceded the hearing.

- Eight people provided oral comments at the public hearing
- Two written comments were received prior to the hearing
- Nine written comments were received after the hearing

Staff received many comments on the draft permit and we combined some of them where it is possible without losing specifics.

1. Liability and Remediation Plan

Comments were received questioning where the liability and damages rest in the event of a failure to meet safeguards and who specifically has the financial liability for cleaning the polluted waterways and adjacent properties. A copy of the Contractor's remediation plan was also requested. Staff Response: The VPA Regulation 9VAC25-32-490 sets forth guidelines for compliance with biosolids use practices. The permit holder is responsible for ensuring that all federal, state, and local regulations are met. The permit holder is required, by regulation, to obtain financial assurance. Requiring a remediation plan is outside the realm of the Permit Regulation and is not part of the issuance of the permit. The Permit Regulation does not require a remediation plan as such a plan would need to

address site specific conditions. A remediation plan, if needed, would be developed after an incident occurred.

Should contamination due to non-compliance of the regulation be determined the permit holder would be liable and subject to enforcement action.

2. Quality of Life

Many comments were received expressing concerns over the affect of land application activity on the citizens that reside near a land application site. The comments included:

- Odor, Pathogen and Vector Attraction
- Haul Routes as they pertain to safety on the roads
- Adjacent landowner property impact from field access point
- Property value impact and "appeal" of the County as a place to live and visit

Staff Response: Staff concurs that there is an odor associated with the land application activity. 9VAC25-32-520 and 9VAC2-32-610 set forth guidelines for Sludge quality and composition and Biosolids treatment. These guidelines establish the minimum treatment and sampling requirements for any biosolids source, and are designed to ensure that adequate treatment and stabilization occurs to reduce odors and pathogens. The Biosolids Expert Panel concluded that odor is a characteristic of biosolids that may affect adjacent property owners, and recommended that permit holders utilize odor control plans. Requirements for such plans are included in the proposed regulatory revisions. The Panel could not make any determination as to whether or not biosolids odors had any impact on property values. Haul routes are required to be identified in the permit application, and site-specific issues related to safety are addressed. Transport vehicles are required to follow all applicable highway laws.

The Regulation is currently under review. The reopener language contained in the permit provides that the permit will be modified as necessary and appropriate should substantial changes to the regulation occur.

3. Pending Lawsuits

Comments were received expressing concerns about the Contractor being involved in pending lawsuits in various states.

Staff Response: This issue is outside the realm of the Permit Regulation. Staff cannot comment on pending legal actions in other jurisdictions.

4. Target National Sewage Sludge (TNSSS) Survey

Comments were received in regards to the TNSSS Report issued by the U.S. EPA and the effect the report will have on the VADEQ permitting process. The comments included:

- the survey found toxic anion, metals, flame retardants, pharmaceuticals, steroids, hormones and other organic compounds
- Pharmaceuticals, steroids, and hormones are controlled substances under U.S. law and cannot be distributed without a prescription from a Medical Doctor or Licensed Veterinarian
- The State Water Control Board (SWCB) should obtain a legal opinion from the Attorney General before granting any permit
- The SWCB should put a "hold" on any permits that have already been granted pending the opinion of the Attorney General

Staff Response: The results of this study will be followed and addressed with the development of the Permit Regulation. The reopener language contained in the permit provides that the permit will be modified as necessary and appropriate should substantial changes to the regulation occur. Staff from the Office of the Attorney General (OAG) provided comments on this matter at the SWCB meeting on September 28, 2010. SAAG Butcher has advised the Board that the lawful land application of sewage sludge is not the possession or distribution of any controlled substances that may contaminate the sludge. Furthermore, enforcement of the federal controlled substances statute is outside the Board's purview.

5. Health Impacts

Comments were received expressing concerns about the impact to Human Health. These comments included:

- There is a need to protect the community in the absence of standard testing for toxic metals, pharmaceuticals, and personal care products

- There is no testing for carcinogens
- Guidelines do not address the toxic carcinogens
- There are too many unknowns/unanswered questions about land application as it relates to the long term effects
- Concern over gap in expert panel research
- Long term health concerns are not rigorously studied
- Lack of existing scientific evidence does not make the application safe
- There are no long term studies on health effects when both Virginia Tech and Cornell have recommended long term, consistent study
- Health issues have risen due to not being able to walk outside for general exercise due to the odors
- Work with Wounded Warriors must cease due to health concerns (exacerbation of conditions both physical and mental)
- The lack of a systematic method to collect and monitor data from citizen concerns and health complaints

Staff Response: In accordance with House Joint Resolution No. 694, the Secretary of Natural Resources and Secretary of Health and Human Services convened a Panel of experts in 2007 to study the impact of land application of biosolids on human health and the environment. Information pertaining to the expert panel and the final report can be accessed at http://www.deq.virginia.gov/info/biosolidspanel.html. The panel determined that "as long as biosolids are applied in conformance with all state and federal law and regulations, there is no scientific evidence of any toxic effect to soil organisms, plants grown in treated soils, or to humans (via acute effects or bio-accumulation pathways) from inorganic trace elements (including heavy metals) found at the current concentrations in biosolids."

DEQ also coordinates with physicians at the Virginia Department of Health (VDH) to ensure that the regulations continue to provide protection of human health. VDH asserts that the existing regulatory buffers of 100 feet from property lines and 200 feet from occupied dwellings provide adequate protection to the majority of the public, and buffers of 200 feet from publicly accessible property lines and 400 feet from occupied dwellings will be implemented whenever requested to minimize the need for individual consideration of health complaints related to the spreading of biosolids. VDH has also developed a new process by which they will handle requests for individual consideration above and beyond these extended buffers.

The Office of Land Application Programs (OLAP) maintains an Access database in which all complaints are recorded. DEQ does not employee licensed medical staff and does not maintain health related information on citizens. Specific health concerns, questions, and complaints are referred to the Virginia Department of Health (VDH) for recommendations and follow up.

6. Environmental Impacts

Several comments were received in regards the potential environmental impacts as a result of land application activities. These comments included:

- How will a private lake located downstream be remediated should contaminants be found as a result of land application?
- Irrigation ditches, drainage swales, and creeks flow through or from land application site
- How will Goose Creek be affected?
- Downstream water sources impacted
- Contaminants spread too close to well for proper dissipation
- Contaminants cross property boundaries during slightest rain

Staff Response: The VPA Regulation 9VAC25-32-560.B.3.d.1 requires minimum setback distances for occupied dwellings, water supply wells or springs, property lines, perennial streams and other surface waters, intermittent streams/drainage ditches, all improved roadways, rock outcrops and sinkholes, and agricultural drainage ditches.

Additionally, the VPA Regulation 9VAC25-32-560 sets forth guidelines for compliance with biosolids utilization methods that address soil suitability, biosolids application rates, operation controls, management practices, and buffer zone requirements.

These setback and site management requirements along with 9VAC25-32-30.A that prohibits a discharge from a VPA permitted facility are protective of the environment.

7. Permitting Process Transparency

Several comments were received asking that the permitting process be made more transparent. *Staff Response:* All regulatory public notice requirements were fulfilled. DEQ held an informational public meeting in Warrenton, on June 16, 2009. Approximately 800 adjacent land owners were notified via USPS mail in advance and the meeting was advertised in the Fauquier Times Democrat on June 3, 2009. A thirty day public comment period followed the informational meeting. The public notice of the draft permit was published in the *Fauquier Times Democrat* on March 10 and 17, 2010 and all citizens that had previously commented were notified of the pending permit action. A public hearing was granted on June 28, 2010. The hearing was scheduled and the public notice ran in the *Fauquier Times Democrat* on August 3, 2010. The hearing public comment period ran from August 3, 2010 to September 28, 2010.

One comment was made during the hearing asking for both sides of the issue to be considered and to find a way to expedite the permitting process.

Staff Response: Staff processed the permit application in accordance with the VPA regulation and Virginia Laws.

9. Source Concerns

Comments were received concerning the sources of biosolids. These comments include the following:

- Is there consistency between sources?
- Concerns about most of the sources being from out of County or out of State and the management practices for the material
- Why are septic systems regulated so heavily but D.C. may "dump" their waste on top of the land
- The age and chemical makeup of the contaminants have not been made public to anyone affected, thus making it impossible to find ways to remediate the situation.

Staff Response: Based on more than 30 years of research and land application experience in the United States, the preponderance of the scientific literature indicates that the land application of biosolids, if performed in accordance with current State and Federal regulations, will cause no significant impacts to health or the environment, and is usually considered a beneficial use. DEQ policy and guidance require all permits, including the subject permit, be drafted with stringent limitations and requirements designed to protect both surface water and groundwater quality. Many of those limitations and requirements were developed by the Land Application of Biosolids Technical Committee - a cooperative effort of professionals and technical experts from DEQ, VDH, the Virginia Department of Conservation and Recreation's Division of Soil and Water Conservation, Virginia Tech, and others.

At a minimum, applications of biosolids are required to comply with the VPA Permit Regulation and EPA's Part 503 Biosolids Rule. These requirements include treatment to Class B (or better) pathogen levels; compliance with approved vector attraction reduction requirements (i.e., minimization of pests); compliance with specific site management restrictions with respect to turf and crop harvesting, grazing of livestock, and public access; and compliance with maximum and monthly average biosolids concentration limits for arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc. Biosolids that meet the maximum and monthly average concentration limits for these nine metals are considered by EPA to have minimal metals concentrations. The U.S. Environmental Protection Agency has conducted surveys of sewage sludge throughout the United States to evaluate whether there are other constituents found in biosolids that would warrant further testing requirements before land application. Additional research is being conducted to determine not only the amount present, but also whether these amounts pose significant concerns. DEQ monitors the ongoing work of EPA in this respect, and if necessary, will respond to these findings with additions to the list of regulated parameters.

10. Deny the Permit

Comments were received in opposition to the permit to allow the land application of biosolids until reasonable doubts are properly addressed.

Staff Response: Staff appreciates the information provided by commenters who are opposed to the land application of biosolids. The agency, however, is tasked with supporting environmental law through the

enforcement of existing regulations. At the present time, the land application of biosolids is authorized and regulated in Virginia.

11. Transfer of Program from Virginia Department of Health (VDH) to DEQ

Several comments were received noting the efforts by DEQ since assuming oversight of the biosolids land application program.

Staff Response: Staff appreciates the recognition of the efforts DEQ has made in regards to the Biosolids Land Application Program.

12. Blanket Approach to Permitting

Several comments were received questioning the "blanket" approach to permitting 6000 very different acres within the County.

Staff Response: The permit application requires the submission of individual site specific information. Although the permit covers the entire County, each individual site is reviewed and addressed appropriately.

13. Landowner Agreements and Benefit to the Farmer

Several comments were received in reference to the property ownership versus the farmer leasing and working the land. These comments included:

- Is the landowner aware of what is being spread?
- Many of the farmers do not own or live on the land in which land application takes place
- Why does the benefit to the farmer out weigh the citizens that reside near the land application sites?

Staff Response: 9VAC25-32-530 states "A written agreement shall be established between the landowner and owner [permit holder] to be submitted with the permit application, whereby the landowner, among other things, shall consent to apply sewage sludge on his property. The responsibility for obtaining and maintaining the agreements lies with the party who is the permit holder."

Landowner agreements were provided in each site book submitted to DEQ. Written verification of the accuracy of these landowner agreements was provided to DEQ from the Contractor.

Staff Comments

Following public notice and comment, the Office of the Attorney General reviewed the permit and made recommendations for several minor changes in the permit language. These changes were suggested primarily to enhance clarity in permit requirements, and staff incorporated the changes into this permit as well as the permit template that will be used to develop all future biosolids permits. The permit applicant received a copy of the modified language on December 1, 2010. Staff will recommend the draft permit be issued as written.

General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Seafood Processing Facilities (9VAC25-115): This is a final regulation amendment. The purpose of this proposed regulatory action is to reissue the general VPDES permit for wastewater discharges from seafood processing facilities. The general permit currently in effect for these facilities expires on July 23, 2011. The staff will ask the board to adopt the regulation establishing the General VPDES Permit for Seafood Processing Facilities, 9VAC25-115, as amended. It has been amended to update the general permit and reissue it for another five-year term. The Board authorized a public hearing for this rulemaking on June 21, 2010. A public hearing was held on August 26, 2010 and the public notice comment period closed on September 17, 2010. There were no questions or comments raised at the seafood processing facilities public hearing. Only one significant comment was received during the comment period. The commenter requested that DEQ reduce the reissuance permitting process by not requiring a registration statement from the seafood permittee. Other comments received were not relevant to the development of the seafood processing facilities general permit.

General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Domestic Sewage Discharges Less Than or Equal to 1,000 Gallons per Day (9 VAC 25-110): This is a final regulation amendment. The purpose of this proposed regulatory action is to reissue the general VPDES permit for domestic sewage discharges less than or equal to 1,000 gallons per day. The general permit currently in

effect for these facilities expires on August 1, 2011. The staff will ask the board to adopt the regulation establishing the General VPDES Permit for Domestic Sewage Discharges Less Than or Equal to 1,000 Gallons per Day, 9VAC25-110, as amended. It has been amended to update the general permit and reissue it for a second five-year term. The Board authorized a public hearing for this rulemaking on June 21, 2010. A public hearing was held on August 26, 2010 and the public notice comment period closed on September 17, 2010. Other than staff, no one attended the public hearing, and no comments on the regulation amendment were received. Noteworthy changes in the final DSD general permit regulation as compared to the proposed regulation:

Section 70 - Registration Statement

9. a. - Maintenance Contract - Treatment Works Serving Individual Single Family Dwellings. Clarified that the VDH regulations at 12 VAC 5-640-500 require maintenance contracts for these systems. Owners must indicate if they have a valid maintenance contract, or a variance from the requirement from the VDH. Also clarified that the VDH regulations at 12 VAC 5-640-490 require monitoring contracts. Owners must indicate if they have obtained a monitoring contract, or a waiver from the requirement from the VDH, or if the monitoring requirements are included in the maintenance contract. The owner needs to provide the name of the contract provider in each case.

Section 80 - General Permit

Part I - Effluent Limitations and Monitoring Requirements

- In the proposed permit, the bacteria effluent limits were lowered to the monthly geometric mean value to address recent changes to the Virginia Water Quality Standards (9 VAC 25-260-170). However, the general permit only requires one annual effluent sample to be taken of the discharge. Therefore, for the final draft of the permit, the limits were set to the value in the Standards for cases where there are insufficient data to calculate a monthly geometric mean. This is set as a single sample maximum value, and this conservative approach will protect water quality, since any and all bacteria samples taken will need to meet the limit, and no averaging of multiple samples will be allowed in order for the discharge meet the limit.
- Clarified that monitoring results for individual single family dwellings must be submitted to the VDH in accordance with 12 VAC 5-640.
- Special Conditions:
 - 2. a. Maintenance Contract Treatment Works Serving Individual Single Family Dwellings. Clarified that these are required by VDH regulations at 12 VAC 5-640-500, unless the permittee has been granted a variance from the requirement by the VDH, and that the permittee is responsible for ensuring that the local health department has a current copy of a valid maintenance agreement.

In addition, a number of editorial changes were made to the regulation and permit based upon comments from the Attorney General's office.

Consideration of an Exempt Final Action to Amend the Water Quality Management Planning Regulation (9VAC25-720-50 C) to Revise the Nutrient Waste Load Allocation for the Opequon WRF: Staff intends to ask the Board at their December 9-10 2010 meeting for approval for an Exempt Final Action to amend the Water Quality Management Planning Regulation to revise the nutrient waste load allocation for the Opequon WRF. The staff proposal is based on the court decree for Case No. CL090004007-00, Frederick-Winchester Service Authority v. State Water Control Board and Department of Environmental Quality that was approved by the Board, based on advice of legal counsel, at the September 28, 2010 meeting of the Board. In 2005, the State Water Control Board (Board) upon advice of the Virginia Department of Environmental Quality (DEQ) adopted amendments to the Water Quality Management Planning Regulations, 9VAC25-720, to establish waste load allocations (WLA) for discharges of total nitrogen (TN) and total phosphorus (TP) by some 125 significant discharges including the Opequon Water Reclamation Facility (Opequon WRF) based on the design capacity of each plant. In the 2005 rulemaking, the Frederick-Winchester Service Authority (FWSA) which operates the Opequon WRF requested TN and TP WLAs for the Opequon WRF based on a design flow of 12.6 million gallons

per day (MGD) and the Board adopted final WLAs based on a design flow of 8.4 MGD. Following the submittal of a rulemaking petition by FWSA in 2006, the Board initiated and conducted a rulemaking from 2007 through 2009 to consider revising the TN and TP WLAs under the regulation for the Opequon WRF. This rulemaking culminated in a Board public meeting begun on December 4, 2008, and completed on April 27, 2009, at which the Board denied FWSA's request, Following this Board action, the FWSA filed a Notice of Appeal with the Board and DEQ in May 2009 and a Petition for Appeal with the Circuit Court of the City of Winchester in June 2009 seeking increased WLAs for the Opequon WRF based on the 12.6 MGD design flow, amounting to an increase of 51,091 pounds per year (lbs/yr) of TN and 3,831 lbs/yr of TP. Following the filing of Motions of Summary Judgment and supporting briefs by both FWSA and the Board before the Court, the Court encouraged the parties to consider settlement, because it presented complex regulatory issues and the Court believed that it would be in the parties' respective best interests and the public interest for the parties to attempt to resolve the case by negotiation. The FWSA and the Board, with the Board acting on the advice of DEQ and legal counsel, reached a compromise which requires stringent treatment by the Opequon WRF while also allowing FWSA the full use of the facility's recently completed expansion to 12.6 MGD design flow. The Board, at its meeting on September 27-28, 2010, based on the advice of legal counsel, approved a settlement of the case which would establish allocations for the Opequon WRF based on 3.0 mg/l nitrogen and 0.30 mg/l phosphorus at a design flow of 12.6 MGD. The Board also authorized DEQ to public notice the approved settlement and to receive comments. DEQ received comments from the Chesapeake Bay Foundation (CBF) related to the approved settlement. Copies of the comments made by CBF have been distributed previously to the Board; the FWSA and to the Court. Upon consideration of the pleadings, the arguments of counsel, the comments of the Chesapeake Bay Foundation, and the purposes of the State Water Control Law, the Court found that the proposed settlement, approved by the Board, is fair, adequate, and reasonable and that it is not illegal, a product of collusion, or against the public interest. The Court also found that the proposed decree is a reasoned compromise that considered the legitimate interests of FWSA and the public it serves, and implements the duty of the Board to protect the quality of State waters. In a Consent Decree dated October 19, 2010, the Court decreed that:

"Notwithstanding the 2005 and 2009 Rulemakings and the typical concentration basis for 4 milligrams per liter (mg/l) for TN WLAs in the Opequon WRF's river basin, the TN and TP WLAs allocations for the Opequon WRF shall be increased to credit the WRF for its current 12.6 MGD design capacity while applying more stringent, state-of-the-art treatment, as follows:

- a. The TN WLA based on the Opequon WRF's design capacity shall be increased from 102,311 lbs/yr to 115,122 lbs/yr (derived based on 3 mg/l of TN and 12.6 MGD).
- b. The TP WLA based on the Opequon WRF's design capacity shall be increased from 7,675 lbs/yr to 11,512 lbs/yr (derived based on 0.3 mg/l of TP and 12.6 MGD).
- c. Such increases result in the stated final WLAs for the Opequon WRF, which shall be in addition to any allocations or increases acquired or which may be acquired by the Opequon WRF in accordance with applicable laws and regulations pertaining to nutrient credit exchanges or offsets. As of the date of this decree, the Opequon WFR has acquired additional allocation for TN in the amount of 6,729 lbs/yr by means of a landfill leachate consolidation and treatment project. Thus upon entry of this decree, the Opequon WRF's TN WLA shall be 121,851 lbs/yr.
- d. The Board shall forthwith amend the Regulation pursuant to CODE § 2.2-4006.A.4.b to conform to the WLAs required by subparagraphs a through c of this decree."

The Waste Load Allocation for the Frederick-Winchester Service Authority: Opequon Wastewater Treatment Facility (Opequon WRF - VA0065552) found in 9VAC25-720-50 C is being amended based on the October 19, 2010 decree entered on Case No. CL090004007-00, Frederick-Winchester Service Authority (FWSA) v. State Water Control Board and Department of Environmental Quality. The decree orders allocations for the Opequon Wastewater Treatment Facility based on 3.0 mg/l nitrogen and 0.30 mg/l phosphorus at a design flow of 12.6 MGD which would result in an allocation of 115,122 lbs/year nitrogen, with an additional 6,792 lbs/year nitrogen for the landfill leachate consolidation, for a total of 121,851 lbs/year nitrogen, and a total of 11,512 lbs/year phosphorus.

Consideration of an Emergency Rulemaking to Amend the Water Quality Standards Regulation (9 VAC 25-260-185) to Include the October 2007, September 2008 and May 2010 Chesapeake Bay Criteria Assessment Protocols Addenda: Staff intends to ask the Board at their December 9-10, 2010 meeting for approval for an Emergency Rulemaking to amend the Water Quality Standards regulation to include the October 2007, September 2008 and May 2010 Chesapeake Bay Criteria Assessment Protocols Addenda. The staff proposal will be for an emergency rulemaking as the amendment is required to meet the December 31, 2010 deadline for the completion for the Total Maximum Daily Loads for the Bay and its tidal rivers. The Board previously approved this amendment at your June 22, 2010 meeting as a fast track rulemaking. However, EPA is concerned that under that process the amendment would not be effective under Virginia law until several days after they issue the TMDL. Therefore, EPA has requested Virginia to use the emergency rulemaking procedure to ensure the amendments are effective prior to December 31, 2010. This amendment is expected to be non-controversial because these protocols have been developed by U.S. EPA through a collaborative process within the Chesapeake Bay Program. These protocols reflect the best scientific approach for the Bay states to use in assessing attainment of the standards for the Chesapeake Bay and its tidal rivers. These recently published protocols are being used by U.S. EPA to develop the Total Maximum Daily Loads for the Bay and its tidal rivers. EPA has set a December 31, 2010 completion date for the TMDLs. TMDL's must be developed in accordance with approved water quality standards and it is necessary for the VA standards to refer to each of the addenda published by EPA.

In 2005 the State Water Control Board adopted standards specifically for the Chesapeake Bay and its tidal rivers. Due to the complex nature of the circulation patterns and varying salinity of the Bay waters the standards regulation also includes reference to criteria assessment procedures published by EPA. Since that initial action, the Board adopted an amendment to the standards regulation to include reference to updated assessment procedures published by EPA in 2007. However, the previous action may not be final before the December 31, 2010 deadline. In order to ensure that the amendments are effective by December 31, 2010, an emergency action is being proposed.

EPA has continued to refine the assessment procedures as scientific research and management applications reveal new insights and knowledge about the Chesapeake Bay. Each of EPA's updated procedure documents replace or otherwise supersede similar criteria assessment procedures published in earlier documents, but not all of them. Therefore, it is necessary for the Virginia standards to refer to each of the addenda published by EPA.

The 2007 addendum documents numerical Chesapeake Bay chlorophyll *a* criteria and reference concentrations. The 2008 addendum includes refinements to procedures for assessing Chesapeake Bay water clarity and SAV criteria. The 2010 addendum includes guidance to address: 1. how to properly assess dissolved oxygen criteria as the boundary between open water and deep water varies; 2. revisions to the methodology and application of biologically-based reference curves for the statistical-based approach of criteria assessment; and, 3. revisions to the methodology for assessing chlorophyll *a* criteria, which applies to the tidal James River.

TMDLs must be developed in accordance with approved water quality standards. Therefore, these new assessment procedures must be incorporated in the Virginia Water Quality Standards regulation in a timely way so that the Chesapeake Bay TMDLs can be approved by EPA by December 31, 2010 consistent with the new assessment procedures.

Recommendation

- (1) That the Board adopt the amendment to 9 VAC 25-260-185 as shown in Attachment 1 as an emergency regulation based on the need to amend the Water Quality Standards Regulation (9VAC25-260-185) to include the October 2007, September 2008 and May 2010 Chesapeake Bay Criteria Assessment Protocols addenda in time to ensure the incorporation of the published protocols by the December 31, 2010 deadline.
- (2) That the Board authorize the Department to stop the "emergency regulation" process for this amendment should the current "fast track" proposal complete the fast-track process in time to meet the December 31, 2010 deadline.

Approval of eleven TMDL reports, three TMDL modifications and amendment of Water Quality Management Planning Regulations to incorporate forty-eight TMDL waste load allocations and Notification to the Board of upcoming delegated approval actions by the DEQ Director: Staff will ask the Board to approve portions of eleven TMDL Reports, three TMDL Report modifications, and to adopt amendments to five sections of the Water Quality Management Planning (WQMP) regulation: 9 VAC 25-720.50.A (Potomac-Shenandoah River Basin), 9 VAC 25-720.60.A (James River Basin), 9 VAC 25-720.80.A (Roanoke River Basin), 9 VAC 25-720.90.A (Tennessee – Big Sandy River Basin), 9 VAC 25-720.110.A (Chesapeake Bay – Small Coastal Basin). The amendments consist of adding forty-eight new WLAs. All TMDL reports containing these WLAs have been approved by EPA. Staff will propose the following Board actions: Approval of 11 TMDL reports, 3 TMDL modifications, and Amendment of Water Quality Management Planning Regulation to incorporate forty-eight new WLAs

- 1. The South River benthic TMDL, located in Augusta and Rockingham Counties, proposes sediment and phosphorus reductions for portions of the watershed. The TMDL includes a sediment wasteload allocation of 619.4 tons/year and a phosphorus wasteload allocation of 6,929.9 kg/yr.
- 2. The South River, South Fork Shenandoah River, and Shenandoah River Mercury TMDLs, located in Augusta, Rockingham, Page, and Warren Counties, propose Mercury reductions for portions of the watershed. The three TMDLs include Mercury wasteload allocations of 112 g/yr for the South River, 112 g/yr for the South Fork Shenandoah River, and 112 g/yr for the Shenandoah River.
- 3. The Spout Run benthic TMDL, located in Clarke County, proposes sediment reductions for portions of the watershed and provides a sediment wasteload allocation of 7.44 tons/year.
- 4. The Strait Creek and West Strait Creek benthic TMDLs, located in Highland County, propose CBOD5, sediment, and seasonal ammonia reductions for portions of the watersheds. For West Strait Creek, the report provides a sediment wasteload allocation of 0.02 tons/day, CBOD5 wasteload allocation of 11 kg/day, dry season (June-December) ammonia as N wasteload allocation of 1.6 kg/day, and wet season (January-May) ammonia as N wasteload allocation of 2.9 kg/day. For Strait Creek, the report provides a sediment wasteload allocation of 0.08 tons/day.
- 5. The Smith Creek benthic TMDL modification proposes to reassign the wasteload allocation of a properly closed point-source discharge (Valley View Mobile Home) to a new point-source discharge (Cedar Land Trailer Court). The proposed updates will not cause a water quality violation because the overall wasteload allocation and TMDL are not being modified.
- 6. The Jackson River benthic TMDL, located in Alleghany, Bath, and Highland Counties, proposes Total Phosphorus and Total Nitrogen reductions for portions of the watershed and provides a TP wasteload allocation of 72,955 lbs/growing season and a TN wasteload allocation of 220,134 lbs/growing season.
- 7. The Little Calfpasture River benthic TMDL, located in Rockbridge County, proposes sediment reductions for portions of the watershed and provides a sediment wasteload allocation of 30.4 tons/year.
- 8. The Roanoke River PCB TMDL, located in Montgomery, Roanoke, Bedford, Campbell, Charlotte, Pittsylvania, and Halifax Counties, proposes PCB reductions for portions of the watershed and provides several wasteload allocations for streams. The streams and their respective tPCB wasteload allocations are: North Fork Roanoke River, 28.2 mg/year; South Fork Roanoke River, 230.2 mg/year; Masons Creek, 9.1 mg/year; Peters Creek, 65.4 mg/year; Tinker Creek, 103.9 mg/year; Wolf Creek, 10.0 mg/year; UT to Roanoke River, 0.5 mg/year; Roanoke River, 28,157.7 mg/year; Goose Creek, 0.1 mg/year; Sycamore Creek, 1.4 mg/year; Lynch Creek, 0.1 mg/year; Reed Creek, 0.0 mg/year; X-Trib, 0.1 mg/year; UT to Roanoke River, 0.1 mg/year; Little Otter River, 0.0 mg/year; Big Otter River, 0.0 mg/year; Straightstone Creek, 0.0 mg/year; Seneca Creek, 0.0 mg/year; Whipping Creek, 0.0 mg/year; Falling River, 0.0 mg/year; Childrey Creek, 0.0 mg/year; Catawba Creek, 0.0 mg/year; Turnip Creek, 0.0 mg/year; Hunting Creek, 0.0

- mg/year; Cub Creek, 0.0 mg/year; Black Walnut Creek, 0.8 mg/year; Roanoke Creek, 0.0 mg/year; Difficult Creek, 0.0 mg/year; Roanoke River, 1,931.8 mg/year.
- 9. The modification for Twittys Creek benthic TMDL proposes to revise the WLA to accommodate the expansion of the Drakes Beach WWTP. The revised WLA for this facility would be 18.3 tons/year, or an increase in 14.7 tons/year. This additional load will be taken from the terminated Westpoint Stevens WLA, 16.8 tons/year, which has been transferred to future growth. The adjustment to the future growth allocation will result in no change to the original TMDL or WLA.
- 10. The Middle Fork Holston River, located in Washington and Smyth Counties, proposes sediment reductions for portions of the watershed and provides a sediment wasteload allocation of 100.4 tons/year.
- 11. The Wolf Creek benthic TMDL, located in Washington County, proposes sediment reductions for portions of the watershed and provides a sediment wasteload allocation of 301.6 tons/year.
- 12. The modification for UT Hurricane Branch benthic TMDL proposes to disaggregate the existing sediment wasteload allocation for Blackstone WWTP (60.9 tons/year) into two separate wasteload allocations (Blackstone WWTP at 48.7 tons/year and Blackstone WTP at 12.2 tons/year). This alteration will not change the overall WLA or TMDL and will, therefore, not cause a water quality violation.
- 13. The Pettit Branch benthic TMDL, located in Accomack County, proposes Total Phosphorus reductions for portions of the watershed. The report provides a Total Phosphorus wasteload allocation of 0.01 lb/day.
- 14. The Mill Creek Dissolved Oxygen TMDL, located in Northampton County, proposes organic carbon and nutrients reductions for portions of the watershed. The report provides a TC wasteload allocation of 30.53 lb/day and a TN wasteload allocation of 10.07 lb/day.

The specific portions of the TMDL reports to be approved include the TMDL itself and all the TMDL allocation components, the pollutant reduction scenarios, implementation strategies, and reasonable assurance that the TMDL can be implemented and a summary of the public participation process. The remainder of the TMDL reports is support information. The process for amending the WQMP regulation is specified in DEQ's "Public Participation Procedures for Water Quality Management Planning". The amendments consist of adding forty-eight new WLAs that are included in TMDL reports previously approved by EPA. Staff will therefore propose that the Board, in accordance with §2.2-4006A.4.c and §2.24006B of the Code of Virginia, adopt the amendments to the WQMP Regulation (9 VAC 25-720).

Report On Facilities In Significant Noncompliance: Three permittees were reported to EPA on the Quarterly Noncompliance Report (QNCR) as being in significant noncompliance (SNC) for the quarter ending June 30, 2010. The permittees, subject facilities and the reported instances of noncompliance are as follows:

1. Permittee/Facility: City of Hopewell, Hopewell Regional Wastewater Treatment

Facility

Type of Noncompliance: Failure to Meet Permit Effluent Limits (Ammonia Nitrogen)

City/County Hopewell, Virginia Receiving Water: Gravelly Run River Basin: James River Basin

Impaired Water: Gravelly Run is listed as impaired for low dissolved oxygen.

The causes of the impairment are listed variously as agricultural discharges, atmospheric deposition of nitrogen from industrial point source discharged, internal nutrient recycling, loss of riparian habitat, municipal point source discharges, and wet

weather discharges.

Dates of Noncompliance: January, February, March, April and May 2010

Requirements Contained In: VPDES

DEQ Region: Piedmont Regional Office

Hopewell attributes the violations to a die off of treatment plant bacteria precipitated by discharges from industrial users. Hopewell has additionally indicated that it plans to issue pretreatment orders with penalties for the discharges. Staff from the Piedmont Regional Office are monitoring Hopewell's pretreatment activities to determine whether additional action by the Department is needed to address this issue.

2. Permittee/Facility: City of Elkton, Elton Sewage Treatment Plant

Type of Noncompliance: Failure to Meet Schedule in Consent Order to Begin

Construction

City/County: Elkton, Virginia

Receiving Water: South Fork of the Shenandoah River

Impaired Water: The South Fork of the Shenandoah River is impaired for mercury

in fish tissue. The source of the impairment is listed as

contaminated sediments.

River Basin:
Dates of Noncompliance:
Requirements Contained in:
DEQ Region:
Potomac River Basin
January to June, 2010
Consent Special Order
Valley Regional Office

Staff from the Valley Regional Office are negotiating a revised order which will address Elkton's failure to commence construction in a timely fashion and which will add to the infiltration and inflow corrective actions required by the current order. Staff hope to have the revised order finalized by the Board's first quarterly meeting in 2011.

3. Permittee/Facility: Town of Fredericksburg, Fredericksburg Wastewater Treatment

Plant

Type of Noncompliance: Failure to Meet Effluent Limit (Total Kjeldahl Nitrogen)

City/County Fredericksburg, Virginia Receiving Water: Rappahannock River

Impaired Water: The Rappahannock River is impaired because of lack of aquatic

plants, chloride, fecal coliform, PCBs in fish tissue, lack of benthic diversity and the presence of E. coli. The causes of the aquatic plant impairment are listed variously as agricultural discharges, atmospheric deposition of nitrogen, sediment

resuspension, industrial point source discharges, internal nutrient

recycling, loss of riparian habitat, municipal point source discharges, and wet weather discharges. The chloride impairment is attributed to natural causes. The causes of the fecal coliform impairment are in some cases unknown and in other cases attributed to municipal point source discharges. The cause of the PCB impairment is unknown. The cause of the benthic impairment is believed to be low dissolved oxygen in the River which in turn is linked to the same conditions or causes which impair the growth of aquatic plants. The cause of

excessive E. coli is unknown.

River Basin: Rappahannock River Basin

Dates of Noncompliance: May and June, 2010
Requirements Contained In: VPDES Permit

DEQ Region: Northern Regional Office

Staff from the Northern Regional Office are processing an enforcement action which addresses the permit effluent limit violations and hope to have it finalized by the Board's first quarterly meeting in 2011.

Loudoun County Sanitation Authority (d.b.a. Loudoun Water) - Consent Special Order w/ Civil Charges: Loudoun Water owns and operates the Courtland Rural Village Water Reclamation Facility

(WRF) which collects municipal sewage from Courtland Rural Village, a residential development. The WRF is the subject of Permit No. VPA00010 (Permit) which allows Loudoun Water to treat wastewater which is then pumped to a system storage pond and finally to a wet well at the Creighton Farms Golf Course for use in irrigating the golf course. If the Golf Course is unable to accept the water, the Permit allows Loudoun Water to send water to reserve spray fields in Courtland Rural Village. The Permit sets forth specific restrictions and monitoring requirements including monthly monitoring reports (MR). On August 11, 2009, Loudoun Water submitted monitoring reports for the July 2009 monitoring period. Based on these reports, DEQ found the following:

- 1. The MR reported a freeboard measurement of 1.5 ft. Part I.A.1.a of the Permit requires a minimum lagoon freeboard of two feet;
- 2. The MR reported turbidity as grab samples collected three times per day. Part I.A.1.a of the Permit requires that turbidity analysis shall be performed by a continuous, on-line turbidity meter;
- 3. Although a Certificate to Operate (CTO) had not yet been issued by DEQ, a temporary distribution system from the Courtland Rural Village WRF Pump Station was used to deliver reclaimed water to the golf course irrigation system. Part I.B.13 of the Permit requires Loudoun Water to obtain a CTO prior to operating the reclamation system;
- 4. The MR reported that the turbidity Corrective Action Threshold (CAT) was exceeded three times and the Total Residual Chlorine (TRC) CAT was exceeded three times. No corrective action or resampling was documented. Part I.B.14 requires that if the CAT for turbidity or TRC is reached, the reclaimed water must be resampled or diverted within one hour of first reaching the CAT. Part I.B.17 further states that failure to resample or divert water not in compliance with the CAT standards is deemed a violation of the Permit.

DEQ conducted an inspection of the WRF on September 4, 2009. During the inspection, DEQ confirmed that although a CTO had not been issued, the reclamation system was in operation and being used to deliver reclaimed water from the Courtland Rural Village WRF Pump Station directly to the Creighton Farm Golf Course non-system storage pond. This contravenes not only the Permit provision that requires a CTO prior to operating the reclamation system but also Part I.B.23 of the Permit which requires the reclaimed water be delivered from the WRF Pump Station to the Creighton Farm Golf Course irrigation pumping station, not the pond directly. In addition, DEQ also observed the following:

- 1. No advisory signs or placards were posted adjacent to the non-system storage pond as required by Part I.B.28 of the Permit;
- 2. 4" blue piping was running above ground to the Creighton Farm Golf Course non-system storage pond. This piping did not meet the requirements of 9 VAC 25-740-110.B.8 which sets forth the design criteria for system piping.

Based on the monitoring reports and the inspection, DEQ issued a Notice of Violation (NOV) to Loudoun Water on September 11, 2009. DEQ staff met with a representative of Loudoun Water on September 18, 2009 to discuss the violations. At this meeting, Loudoun Water advised that the freeboard in the system storage pond had reached a level that necessitated spraying the water and it had verbal permission from DEQ based on phone conversations with DEQ staff to operate the reclamation system despite the lack of CTO. DEQ has denied this assertion. The decision to pump the water directly to the non-system storage pond itself rather than the wet well was a financial decision as pumping to the wet well would have required a longer temporary line and therefore a larger investment of funds. The failure to resample or divert the reject water was operator oversight. Loudoun Water advised that an automatic diverter has been installed that will eliminate this situation in the future. Further, Loudoun Water had plans for installing the continuous monitor for turbidity and chlorine. With regards to the signage, Loudoun Water advised that it does not operate the golf course and Loudoun Water had advised the golf course to post the signs, but it never did. Loudoun Water has since made sure the signs were posted. Finally, the piping observed by DEQ was a temporary system and the permanent system now in place does comply with 9 VAC 25-740-110.B.8. Loudoun Water sent a written response to the NOV on Sept 18, 2009 that reiterated some of the points presented at the meeting along with verifying that the on-line monitor for continuously monitoring turbidity and chlorine had been installed and documenting that Loudoun Water had ceased providing any more reclaimed water until a CTO is issued. Loudoun Water submitted a CTO

request on December 7, 2009 and DEQ issued the CTO on February 2, 2010. The other remaining issues, including signage and piping requirements, failing to divert reject water, and failing to have a continuous monitor installed, have been resolved so no further compliance items are necessary for the Order. Therefore, the Order only requires the submittal of a penalty. Civil Charge: \$14,215.

B&J Enterprises L.C., Montgomery Co. - Consent Special Order w/ Civil Charges: Operation of the Blacksburg Country Club Plant, owned and operated by B&J Enterprises, L.C. ("B&J"), is permitted under VPDES permit VA0027481. The Permit was re-issued in September 2008 and will expire in September 2013. The permit allows B&J to discharge treated sewage and other municipal wastes from the Plant, to the North Fork of the Roanoke River, in strict compliance with the terms and conditions of the permit. In submitting its DMRs as required by the permit, B&J has indicated that it exceeded discharge limitations contained in Part I.A.1 of the Permit, for Biochemical Oxygen Demand ("BOD"), Total Suspended Solids ("TSS"), E. coli, total residual chlorine, and pH. In addition, Department staff have noted B&J's failure to submit the 1st year Progress Report for compliance with Ammonia effluent limitations and a timely and complete application for reissuance of the Permit, as required by Part I.A.2 of the Permit. B&J failed to report accurate values for the discharge limitations contained in Part I.A.1 of the Permit for E. coli and submit a plan of action to ensure compliance with the terms of the Permit once influent flows to the Plant exceeded 95% of the monthly average design capacity. B& J notified the Department that it discharged untreated wastewater from the Plant on February 19, 2008, April 28, 2008, June 18, 2009, November 11, 2009, December 9, 2009, December 13, 2009, and March 11, 2010. Per Department policy, Warning Letters ("WL") and Notices of Violations ("NOV") were issued to B&J for the above reference violations. B&J responded, as required by the WLs and NOVs and has worked proactively with the Department to find an appropriate resolution of the compliance issues at the Plant. The Order before the Board will supersede a 2007 Order between B&J and the SWCB and includes a civil penalty of \$11,583 for the violations listed above. The injunctive relief requires B&J to develop a plan of action to complete the last capital project from the 2007 Order (raise Pump Station #1 above the flood plain). B&J will be required to confirm the flow meter calibration at the Plant and develop a plan of action to achieve compliance with the E. coli effluent limit. Compliance with the E. coli limit must be achieved no later than June 20, 2011. The Order contains an interim E. coli effluent limit. B&J will also be required to provide additional training to its employed or contracted wastewater works operator and a regular attendance by its employed or contracted wastewater works operator is proscribed to ensure consistent compliance with remaining effluent limits and conditions. Civil charge: \$11,583.

Town of Clifton Forge, Alleghany Co. - Consent Special Order Amendment – Issuance: The Town of Clifton Forge ("Town") owns and operates the Clifton Forge Sewage Treatment Plant and the associated wastewater collection and conveyance system. The Board issued a Consent Order to the Town on June 5, 2006 ("2006 Order") for multiple wastewater overflows from the collection system (just prior to the issuance of the Order the Town completed a major upgrade of the treatment and equalization capacities of the Plant to eliminate overflows at that location). Among other items, the Order required the Town to submit and comply with a Corrective Action Plan ("CAP") for eliminating overflows caused by excessive infiltration and inflow ("I&I") by December 31, 2010. Because the Town needs to develop further data to characterize flows in the collection system to document compliance with the requirement to eliminate excessive I&I, the Town has requested an extension of the December 31, 2010 deadline for completing the CAP. The Town is currently in compliance with all requirements of the 2006 Order. The Amendment before the Board extends the deadline for completing the CAP until December 31, 2013. The Amendment also includes new requirements to: 1) submit a comprehensive report of water consumption, system flow, groundwater, and rainfall data; 2) submit a comprehensive report of the results of the collection system tributary inspections performed between July 1, 2010 and November 30, 2011; 3) submit a revised Compliance Verification Plan; 4) submit a schedule of any additional cost effective I&I work identified as a result of the data collection and inspections referenced in (1) and (2) above by June 30, 2012; 5) by December 31, 2013, submit a report documenting compliance with the deadline for elimination of excessive I&I based on data collected through November 30, 2013.

Dare to Care Charities, Inc., Botetourt Co. - Consent Special Order Amendment - Issuance: Dare to Care Charities, Inc. ("DTCC") owns and operates a wastewater treatment plant ("Plant") that serves a residential outdoor camp for persons with disabilities. Operation of the Plant is authorized by VPDES Permit No. VA0060909 ("Permit"). The State Water Control Board issued a Consent Order ("Order") to DTCC on March 19, 2010 primarily for multiple violations of effluent limits specified in the Permit. The Order required DTCC to install and operate an in-ground wastewater treatment system to replace the existing Plant not later than December 31, 2010 and submit a Treatment Works Closure Plan for the Plant within 30 days of the effective date of the Order. Additional requirements of the Order included: payment of a civil charge of \$7,000.00; submittal of correct and complete DMRs for the months of August, September, and October; and submittal of a revised and corrected Operations and Maintenance Manual for the Plant. In part due to weather-related delays in obtaining a detailed soils evaluation, DTCC has requested an extension of the deadlines of the Order for completing construction and operation of the in-ground wastewater treatment system and decommissioning of the Plant. Through a consultant, DTCC has submitted a proposed revised schedule to meet the requirements of the Order for installation of an inground system and closure of the existing Plant. The proposed Amendment revises the deadlines for: 1) installation of the in-ground system (now due December 1, 2011), Closure Plan submittal (now due 30 days after the effective date of this Order), and decommissioning of the Plant (now due December 31, 2011).

Town of Kenbridge STP, Lunenburg Co. - Consent Special Order with Civil Charge - Issuance: In October and November 2009 the Town of Kenbridge experienced unpermitted discharges from the Town's sanitary sewer collection system which reached waters of the state. The discharges were caused by a defect in a sewer line in the vicinity of the Town's Chappell Street pump station. The sewer line defect repair was reportedly delayed until the spring of 2010 due to wet weather. On March 29, 2010 the Department was notified that a sewage overflow was occurring at a manhole in the vicinity of the Chappell Street pump station. On March 29–30, 2010 the Chappell Street pump station experienced a complete failure, resulting in an unpermitted discharge of sewage to waters of the state. The Town brought in a septage hauler to pump out the pump station wet well until a portable pump could be brought in and set up. The Town has also experienced intermittent iron effluent limit violations, operation and maintenance deficiencies, as well as monitoring and notification violations. Town officials met with the Department on April 20, 2010, to discuss the sanitary sewer overflows, infrastructure repairs, and iron Permit effluent limit violations. The Town Manager informed the Department that a portion of the high iron concentrations in the STP effluent may be coming from the deteriorating iron pipe comprising the collection system. The Town proposes to slip line the deteriorating pipe and address its sanitary sewer maintenance deficiencies as part of an infiltration and inflow (I&I) corrective action plan which is to be submitted and implemented under the provisions of the proposed order. Civil charge: \$39,000. The proposed action contains a Supplemental Environmental Project in the form of developing and instituting a Capacity, Management, Operation and Maintenance Program for the sanitary sewer collection system.

Town of Culpeper Wastewater Treatment Plant, Culpeper Co. - Consent Special Order with Civil Charges - Issuance: The Town of Culpeper Wastewater Treatment Plant (the Plant) is owned and operated by the Town of Culpeper (Town). The Plant is located in Culpeper, Virginia, and is authorized to discharge to Mountain Run, which is located in the Rappahannock River Basin, pursuant to VPDES Permit No. VA0061590 (Permit). This enforcement action resolves Permit effluent violations and Operation and Maintenance violations at the Plant. In submitting monthly DMRs as required by the Permit, the Town indicated to DEQ that it exceeded discharge limitations contained in the Permit, for the weekly concentration average maximum limit for Total Kjeldahl Nitrogen, the monthly concentration average limit for Ammonia as Nitrogen, and the weekly concentration average maximum limit for Ammonia as Nitrogen for the month of January 2009. The Town reported to DEQ that the exceedances occurred because the effluent water temperature dropped below 10 degrees centigrade on or about January 15th, and didn't rise above 10 degrees centigrade until after February 7th. The Town also stated

that the biological removal of nitrogen was adversely affected. In addition, the Town indicated that it violated the weekly concentration average maximum limit for Ammonia in February 2009, and the instantaneous technical minimum limit for chlorine in March 2009. The Town attributes these violations to seasonal variations of temperature. The Town noted in the August 2009 Discharge Monitoring Report (DMR), that it missed TKN samples from August 5th and August 6th when the Plant's digester unit broke. DEQ also conducted an inspection of the Plant on June 11, 2009, and found several areas of concern that DEQ had noted on previous inspections conducted on December 14, 2006, and December 4, 2007. These items included repeated issues with influent pumps being out of service, rips and degradation to the liner of cell number 1 of the equalization lagoon, and outstanding repairs to the primary clarifiers. In addition to the aforementioned violations, the Town also experienced three unauthorized discharges. The Town reported to DEQ that a severe storm occurred on June 26, 2009, and caused loss of primary power at the pump station and secondary generator power at the pump station when the generator was struck by lightening. The Town reported that due to this power outage, an overflow of approximately 84,000 gallons of sewage discharged to Mountain Run from the sanitary sewer collection system outside of the Plant property. The Town also reported to DEO that on August 4, 2009, the Town discovered the force main from a pump station was leaking resulting in an estimated release of 4,452 gallons of sewage. The Town reported to DEQ that the leak was patched immediately, and that very little of the discharge reached Mountain Run. Additionally, the Town reported to DEQ that on August 29, 2009, the Town discovered sewage seeping out of the clean-out pipe and manhole of the wet well at a pump station. The Town informed DEQ that the lead pipe failed when vibration caused a wiring short to the pump. Plant staff estimated that approximately 5,000 gallons of sewage were released. The Town reported that any flow that was not absorbed into the soil around the pump station went into a storm water management pond behind the Plant. The Consent Order requires that the Town repair or replace the liner of cell 1 of the equalization lagoon no later than July 15, 2011. All other outstanding issues identified above have been adequately addressed by the Town. The Town of Culpeper plans to spend approximately \$229, 600.00 for the design and construction of the lagoon repairs. In addition The Town has spent approximately \$1,000.00 in repairs for the force main, and approximately \$1,000.00 in repairs to the pump station. Civil charge: \$13,550.

Greensville County Water and Sewer Authority Town of Jarratt Wastewater Treatment Plant -Consent Special Order w/ Civil Charges: Greensville County Water and Sewer Authority ("GCWSA") owns and operates the Town of Jarratt Wastewater Treatment Facility in Jarratt, Virginia, which treats and discharges sewage and other municipal wastes for the residents and businesses of Jarrett. The Facility is subject to VPDES Permit VA0020761. GCWSA submitted Discharge Monitoring Reports ("DMRs") for the November 2007 through January 2010 monitoring periods which indicated that it exceeded Permit effluent limitations for biochemical oxygen demand ("BOD"), total suspended solids ("TSS"), dissolved oxygen, and total zinc. In addition, GCWSA reported flow exceeding design capacity for the months of November 2007 through April 2008. On June 24, 2008, the Department issued a Notice of Violation to GCWSA for the permit effluent limits violations. On July 15, 2010, DEQ staff met with representatives of GCWSA to discuss the violations. GCWSA staff stated that it had plans under development to eliminate the Facility in two years and divert the wastewater to the Three Creek Regional Wastewater Treatment Plant. Later, GCWSA decided to keep the Jarratt Facility open to preserve capacity at the Three Creek Regional plant for future growth. GCWSA hired a consultant who developed a plan to install a new air diffuser to increase effluent quality and a valve that would allow influent wastewater flow diversion from the Jarratt Facility to the Three Creek Facility if needed. A requirement to submit a corrective action is included in Appendix A of the Order and must be completed by December 1, 2012, which will allow time for design, permitting, contractor bidding and construction. According to the County's consultant, the cost of the injunctive relief is estimated at \$400,000 for the requirements listed in Appendix A. Civil charge: \$8,700.

Henrico County - Consent Special Order w/ Civil Charges: Henrico County owns and operates the Henrico County Water Reclamation Facility in Varina, Virginia, which treats and discharges sewage and

other municipal wastes for the residents and businesses of the County. The facility is subject to VPDES Permit VA0063690. From June 20, 2009 through December 3, 2009, Henrico reported 26 sanitary sewer overflows (SSOs) from various points on its wastewater collection system. On December 18, 2009, DEQ issued a Notice of Violation (NOV) for SSOs reported through December 3, 2009. On January 14, 2010, the Department met with Henrico to discuss the NOV and the related unauthorized discharges. Henrico submitted a plan consisting of a list of inflow and infiltration ("I&I") projects designed to eliminate the number of unauthorized discharges which occur from the Facility collection system. The plan and schedule are incorporated in Appendix A of the Order, A review of DEO files indicates that from December 3, 2009 through June 11, 2010, 50 additional unauthorized discharges occurred. A Department review of DMRs and overflow reports submitted by the County indicate exceedances of the Permit effluent limits for ammonia, total suspended solids (TSS) and carbonaceous biochemical oxygen demand (CBOD) during February 2010. Henrico stated that these violations occurred because the Facility had lost nitrification capability on February 3, 2010 due to influent flow that was higher than the Facility could handle. In addition, Henrico stated that the total available aerobic volume was not in service because past process control operations during high flow indicated that the secondary clarifier would be adequate in sustaining the biomass. The County will be required to develop formal written standard operating procedures (SOPs) specifically outlining the most optimal plant configuration and process modes for given sets of flow, temperature, and influent loading conditions. The cost of the injunctive relief is \$85,639,091 for the SSO projects listed in Appendix B. Civil charge: \$29,500.

City of Richmond - Consent Special Order w/ Civil Charges: The City of Richmond (City) owns and operates a wastewater treatment plant which treats and discharges sewage, stormwater runoff, and other municipal wastes for the residents and businesses of the City. The plant is subject to VPDES Permit VA0063177. A Department review of DMRs and overflow reports submitted by the City indicate exceedances of the Permit effluent limits for minimum pH in April, May, June, November of 2009 and February 2010, minimum chlorine (parameter 213) in September through December 2009 and January, February, March, and August 2010, maximum chlorine (parameter 005) in July 2009, and total suspended solids in May and June of 2010. In addition, Richmond reported seventeen unauthorized discharges in the form of dry weather sanitary sewer overflows ("SSOs") from the sewer collection system. The Department issued NOVs to the City on November 20, 2009, and February 11, 2010 for the Permit effluent violations and unauthorized discharges reported through December 2009. On December 21, 2009, the Department met with the City to discuss the discharges and effluent violations. Richmond stated that naturally occurring pH sag from the nitrification process, combined with pH effects from chlorine and sulfur dioxide addition for disinfection, resulted in pH control issues. At the time, Richmond did not have pH adjustment capabilities; however, on May 29, 2009, Richmond installed magnesium hydroxide feed equipment to adjust pH. After several months of fine tuning the feed equipment, the magnesium hydroxide addition has resolved the pH issue. Richmond plans to eliminate the use of pressurized chlorine gas due to the operation and maintenance costs, and will switch to ultraviolet disinfection, which is to be completed in 2012. This will result in the elimination of future chlorine violations. With respect to the dry-weather SSOs, Richmond has 1,322 miles of sanitary and combined laterals and sewers in the City and it operates an Operations and Maintenance program (>\$3 million) and a capital improvement program (>\$10 million) for the sanitary and combined sewer system. In 2008, Richmond open-cut replaced 6,742 linear feet ("LF") of sewer, rehabilitated utilizing cured-in-place pipe 45,981 LF, TV inspected 243,313 LF and cleaned 237,213 LF. In 2009, Richmond open-cut replaced 8,205 LF of sewer, rehabilitated utilizing cured-in-place pipe 26,671 LF, TV inspected 147,614 LF and cleaned 204,924 LF. Since the City has a robust program addressing combined sewer overflows ("CSOs") and SSOs, an Order appendix requirement for the overflows is not required. The cost of the injunctive relief is \$6,000,000 to replace pressurized chlorine gas with UV disinfection. The annual sanitary and combined sewer system operation and maintenance costs are approximately \$13,000,000. Civil charge: \$14,000 with a SEP. The SEP proposed by the City of Richmond is to plan and complete three stream cleanups by November 31, 2011 for the Reedy Creek watershed on the south side of the James River and the Cannon's Branch watershed on the north side of the James River. The goal of the cleanups will be to improve water quality

in the James River. The SEP is an environmental restoration and protection project used to restore or protect natural environments and ecosystems.

Branscome, Inc., Accomack County - Consent Special Order with a civil charge: Branscome, Inc. ("Branscome") operates a Facility in Oak Hall, Accomack County, Virginia, at which it manufactures ready-mix concrete. The Facility is subject to the Permit through Registration No. VAG110265, which was effective October 1, 2008, and expires on September 30, 2013. The Permit authorizes Branscome to discharge process waste water commingled with non-contact cooling water and storm water associated with industrial activity through Outfall 001. On March 2, 2010, DEQ compliance staff conducted an inspection of the Facility that revealed the following deficiencies of Permit requirements: not properly maintaining freeboard inspection logs for the settling and holding ponds; not reporting to DEQ when required freeboard levels in the holding pond were not being maintained; failure to sweep the Facility entrance weekly; failure to perform a quarterly visual examination of storm water quality; intermittently discharging storm water that had accumulated in a rail-siding loading pit to a location (a perimeter ditch) not identified as an outfall in the Permit; and failing to report those unauthorized discharges to DEO within 24 hours of their occurrence. On May 24, 2010, DEQ issued a Notice of Violation ("NOV") advising Branscome of the deficiencies revealed during the Facility inspection conducted on March 2, 2010. Branscome responded to the NOV in writing on August 17, 2010. Additionally, Branscome met with DEQ enforcement staff on June 4, 2010, at DEQ, and on August 31, 2010, at the Facility. Branscome acknowledged each of the violations and represented that storm water from the loading pit was now being pumped into the holding pond; that, in order to resolve the freeboard issue, the holding pond had been doubled in size; that Outfall 001 would be relocated to accommodate the expansion of the holding pond; and that the Facility storm water pollution prevention plan ("SWP3") had been updated to require weekly sweeping. The Order requires Branscome to pay a civil charge within 30 days of the effective date of the Order. To ensure compliance with the Permit, the Order also requires Branscome to submit documentation of routine inspections and visual examinations of storm water quality for one year; to submit a corrective action plan and schedule for construction of a permanent containment structure around the expanded holding pond (including a permanent, discrete location for Outfall 001) and for the proper management of storm water that accumulates in the rail-siding loading pit; a description of the housekeeping measures that will be implemented to minimize the amount of concrete fines and other sediment that collect at the Facility entrance; and a revised SWP3 that incorporates the corrective action. Civil charge: \$5,670.

Carrollton Used Auto Parts, Inc., Isle of Wight Co. - Consent Special Order with a civil charge: Carrollton Used Auto Parts, Inc. (t/a Joe's Auto Parts) ("Joe's") owns and operates an automobile salvage yard ("Facility") in Isle of Wight County, Virginia, at which used motor vehicles are dismantled for the purpose of selling and recycling used automobile parts and/or scrap metal. Storm water discharges from the Facility are subject to the Permit through Registration No. VAR050280, which was effective July 1, 2009, and expires June 30, 2014. The Permit authorizes Joe's to discharge to surface waters storm water associated with industrial activity under conditions outlined in the Permit. As part of the Permit, Joe's is required to provide and comply with a Storm Water Pollution Prevention Plan ("SWP3") for the Facility. On February 4, 2010, DEQ compliance staff conducted an inspection of the Facility that revealed the following: failures to perform benchmark monitoring of storm water discharges for one monitoring period, one quarterly visual examination of storm water quality for one quarter, one quarterly Facility inspection for one quarter, and one annual comprehensive site compliance evaluation ("CSCE"); failure to conduct employee training in storm water pollution prevention; and failure to comply with SWP3 requirements by not accurately identifying in the SWP3 and the accompanying site map the locations of all discharge points and potential pollutant sources and by not having a SWP3 that was signed by an appropriate Facility representative. On April 5, 2010, DEQ issued a Notice of Violation ("NOV") advising Joe's of the deficiencies revealed during the Facility inspection conducted on February 4, 2010. A representative of Joe's responded to the report of the February 4, 2010, compliance inspection by electronic mail on April 5, 2010, to the effect that a facility SWP3 had been developed and implemented;

a facility inspection and a visual examination of storm water quality were conducted on March 15, 2010; and training in storm water pollution prevention had been conducted. The Consent Special Order ("Order") requires Joe's to pay a civil charge within 30 days of the effective date of the Order. To ensure continued compliance with the Permit and the SWP3 the Order requires Joe's to submit by January 10, 2011, an updated SWP3 that includes all elements required by the Permit; to submit documentation of routine inspections and visual examinations of storm water quality for four calendar quarters, with the first submittal also due by January 10, 2011; and to perform additional benchmark monitoring of storm water discharges at both permitted storm water outfalls during each of calendar years 2010 and 2011. Civil charge: \$4,660.

Harrisonburg-Rockingham Sewer Authority ("HRRSA") - North River WWTP - Consent Special Order with civil charge: HRRSA owns and operates the North River WWTP facility serving the City of Harrisonburg; the towns of Bridgewater, Dayton and Mount Crawford; and surrounding areas in Rockingham County. The Permit allows HRRSA to discharge treated sewage and other municipal wastes from the North River WWTP to the North River in strict compliance with the terms and conditions of the Permit. The design capacity of the facility has been rated and approved as 16.0 MGD. HRRSA is presently upgrading and expanding the sewage treatment plant to meet nutrient limits with a design capacity of 22.0 MGD. That work is scheduled to be completed by December 31, 2010. On January 13, 2010, HRRSA reported unauthorized discharges at two locations that were part of one event. This report was received in a timely manner. One of the unauthorized discharges occurred at a manhole adjacent to Cooks Creek, approximately 250 feet upstream of its confluence with the North River. The Authority estimated the size of the discharge to be 650,000 gallons. The second discharge occurred at a junction box at the North River WWTP. The discharge entered the North River. The unauthorized discharges occurred while HRRSA was attempting to tie-in a new grit chamber at the WWTP. The Authority estimated the size of this discharge to be 18,000 gallons. On January 14, 2010, DEQ staff conducted a site inspection and observed evidence of the unauthorized discharge from the grit chamber which entered the North River. On February 16, 2010, DEQ issued a Warning Letter to HRRSA for CBOD₅ loading and concentration maximum permit effluent limit violations in December 2009. The Warning Letter also cited unauthorized discharges on December 9, 2009 and December 29, 2009. HRRSA attributed these unauthorized discharges to the region's extraordinary wet winter weather, in which over 31 inches of precipitation (rainfall/snow) was recorded in December 2009. On March 10, 2010, DEQ issued a Notice of Violation to HRRSA for the unauthorized January discharges. The NOV also cited CBOD₅ and TSS loading permit effluent limit violations that occurred in January 2010. In addition, there was a D.O. concentration minimum permit effluent limit violation in August 2009, a chlorine instantaneous technical minimum concentration permit effluent limit violation in January 2010, and two unauthorized discharges in March 2010 (March 13 and March 16, 2010) that were not included in any enforcement documents. On March 24, 2010, Department staff met with representatives of HRRSA to discuss the NOV's violations, the problems that led to the violations and corrective actions needed to address the problems. By letters dated January 26, 2010, March 9, 2010 and April 22, 2010, HRRSA submitted to DEQ information about the unauthorized discharges. HRRSA attributed the January 13, 2010 unauthorized discharges to a design error in the construction plans for the new grit chambers. The design error resulted in the new grit chambers being constructed with a higher water surface elevation than the existing grit chambers, so that wastewater overflowed the existing, interconnected open channel system when the new grit chambers were placed into service. HRRSA has taken action to address the design error through the construction of a new telescoping valve and additional piping to work around the elevation differences which led to the overflows. The completion of the Facility upgrade and expansion is expected to address the reasons for the effluent limit violations and the March unauthorized discharge violations. The proposed Order, signed by the Authority on August 11, 2010, is a civil charge only Order. COSTS: \$124,800 for corrective actions. Civil charge: \$10,500.

Bandy, LLC, Floyd Co. - Consent Special Order with civil charge: On April 16, 2008, the DEQ conducted a Virginia Water Protection (VWP) inspection of the Site. During the inspection, DEQ staff

observed that state waters, in the form of wetlands, had been excavated resulting in the creation of three separate and distinct linear features and the excavated material was discharged adjacent to the linear features into the same state waters (wetlands). Wetland/stream data was collected by DEQ Staff and a Bog Turtle corpse was discovered at the Site, though cause of death was indeterminate. The species identity was confirmed by the Wildlife Diversity Project Manager in the Wildlife Diversity Division of the VDGIF. Feature #1 on the western side of Jack's Mill Road, measuring 435 liner feet (0.04 acres), is a stream that may have been channelized decades before the April 16, 2008 DEQ inspection and has historically been maintained for the purpose of drainage or irrigation. Though this channelized stream normally would be considered jurisdictional state waters subject to regulation, it has reached a naturalized state in the channelized form. When the specific facts and history involved with this re-channelized stream are combined with the fact that the activity did not result in any modifications that changed the character, scope, or size of the original design, a permit exclusion for maintenance activity was determined to apply. The 0.04 acres of excavated material that was discharged to 0.11 acres of the adjacent wetland, as a result of side casting in piles from 8 to 14 feet wide and from 1 to 3 feet high, is not included in any permit exclusion and was an unauthorized discharge. Feature #2 on the eastern side of the Little River, measuring 413 linear feet (0.05 acres), is a ditch that may have been excavated decades before the April 16, 2008 DEQ inspection and the has historically been maintained for the purpose of drainage or irrigation. Since the excavation did not result in any modifications that change the character. scope, or size of the original design, a permit exclusion for maintenance activity was determined to apply. The 0.05 acres of excavated material that was discharged to 0.05 acres of the adjacent wetland, as a result of side casting in piles 4 to 6 feet wide and from 1 to 4 feet high, is not included in any permit exclusion and was an unauthorized discharge. Feature #3, measuring 25 linear feet, 1 to 3 feet wide, and 1 to 2 feet deep with 10 feet excavated through a wetland and 15 feet excavated through an upland natural river berm along the little river, is a ditch with an indeterminate time of origin. Prior to the excavation, the wetland may have had no direct surficial connection with, but was adjacent to, the Little River. Though this ditch may result in drainage associated with the immediate or the gradual conversion of a wetland to a nonwetland, there is no evidence that conversion is taking place at this time. The discharge of 0.002 acres of excavated material to a nonwetland area is excluded from the VWP requirements. Pay a civil charge of \$9,750 within 30 days of the effective date of the Order in settlement of the violations cited in this Order; and purchase 0.16 compensation credits at a 1:1 ratio from an approved wetlands mitigation bank or make an equivalent payment of \$9,600 to the Virginia Aquatic Resources Trust Fund for the functional loss at the Site and provide proof of purchase to DEQ within 30 days of the effective date of this order.

Glenhaven South Subdivision / Winchester Homes, Inc., Spotsylvania Co. - Consent Special Order with civil charge- Issuance: Winchester Homes Inc. (Winchester Homes) owns a 152 acre subdivision called Glenhaven South, located in Spotsylvania County, Virginia. DEQ issued VWP General Permit Authorization No. WP4-05-1068 (Permit) on July 21, 2005, which expired on July 20, 2010 to Spotswood LLC. The permit was transferred to Winchester Homes from Spotswood LLC on August 30, 2006. The Permit authorized the impact to 0.048 acre of surface waters, consisting of 0.017 acre palustrine forested wetlands (PFO), 0.029 acre (255 linear feet) perennial stream channel, and 0.002 acre (40 linear feet) of intermittent stream channel associated with construction of the Glenhaven South subdivision. The total authorized impacts taken during construction were less than 0.10 acres of wetlands and less than 300 LF of stream so the Permit required reporting-only and did not require compensation. On July 17, 2009, DEQ staff reviewed the project file and conducted a site visit to determine compliance with the conditions and requirements of the Permit, State Water Control Law, and the Regulations. During the site visit, DEQ staff observed unauthorized discharges of fill material to approximately 390 linear feet of stream arising from lot grading and driveway crossings. As a result of the violations observed during the July 17, 2009 inspection, DEQ issued Notice of Violation (NOV) Number 2009-08-NRO-006 to Winchester Homes on September 1, 2009. On September 10, 2009, Winchester Homes sent a NOV response letter explaining that the unauthorized impacts were a result of an error in the aerial-supplied topography and the subsequent excessive amount of cutting during the rough grading operations by the site work

contractor. This error caused the adjustment of the construction plans and the disposal of excess material, resulting in the taking of additional stream impacts. On October 10, 2009, Winchester Homes sent a follow-up letter with a proposed compensation plan for the unauthorized impacts. On November 9, 2009, DEQ provided comments to Winchester Homes on the proposed compensation plan. DEQ noted that the proposed mitigation/compensation plan would not be sufficient to compensate for the additional impacts taken. Also, DEQ noted that the previously authorized impacts and the unauthorized impacts of 390 LF cumulatively exceed the reporting-only threshold of 300 LF. Therefore, all the impacts associated with the project require compensation. After multiple drafts of the mitigation/compensation plan, DEO approved the Final Mitigation Plan on July 8, 2010, including draft deed restrictions and plats for the onsite and off-site preservation areas to compensate for all impacts to state waters as a result of the project. The stream channels proposed for preservation are located within the downstream system and provide similar functions and ecological characteristics as the impacted stream channels. Due to the location of the preserved stream system, the additional buffer protects the aquatic system against present and future adverse effects and provides habitat for various state species. The Unified Stream Methodology (USM) shows that for these impacts the required preservation should be 937 and 7:1 ratio; the final compensation/preservation plan will provide 999 compensation credits, at a ratio of 12:1. Pursuant to Guidance Memo No. 08-2009, "Use of Preservation for Compensatory Mitigation in VWP Permits", Stream preservation as a sole source of mitigation can be used for exemplary systems under documentable threat of loss or degradation and when preservation of an exemplary system offsets impacted functions. The preservation area qualifies as an exemplary stream by meeting the criteria of the GM 08-2009 and the compensation provides sufficient no-net-loss of function of the permanent impacts. The Consent Order requires Winchester Homes to purchase 0.03 acres of wetland (PFO) credits from Blackjack Wetland Mitigation Bank and provide proof of recordation of the on-site and off-site preservation areas as set forth in the Final Mitigation Plan. The cost associated with returning to compliance, including Appendix A of the Order, is estimated at \$200,000. Civil charge: \$20,100.

Getty Petroleum Marketing, Inc., Richmond - Consent Special Order w/ Civil Charges: Getty Petroleum Marketing, Inc. ("Getty") owns three 10,000 gallon USTs that are located at 7000 Three Chopt Road in Richmond, Virginia (Facility ID# 4-002293). On June 12, 2009, DEQ staff conducted an UST inspection at the property and found numerous deficiencies. All the deficiencies were corrected informally except for those surrounding the failure to report Statistical Inventory Reconciliation ("SIR") failures that occurred during the months of May 2008 through May 2009. A Notice of Violation was issued on July 31, 2009 for failure to report a suspected release. The suspected release was assigned Pollution Complaint # 2009-4538, and was closed following successful tank and line tightness testing and an analysis by DEQ staff indicating that there is low-level soil and groundwater contamination with no risk to receptors. The owner's consultant addressed the release detection issues; however there have been additional inconclusive release detection results using the SIR method of release detection. Getty reported all of the inconclusive results to DEO and performed more testing, which showed passing results. Nevertheless, because SIR testing has proven to be an ineffective method at this facility and is no longer a viable option for release detection, Getty has agreed to provide a plan and schedule for the installation of an acceptable alternative method to the current SIR release detection being performed at the facility. Getty agreed to the Consent Special Order with the Department to address the above described violations by agreeing to provide a plan and schedule for the installation of an acceptable alternative method to the current SIR release detection by December 27, 2010. The injunctive relief, including installation of the new release detection method, has already been completed. DEQ staff estimate the cost of injunctive relief to be approximately \$8,000 to 10,000. Civil charge: \$2,600.

Henrico County 911 Training Center, Henrico Co. - Consent Special Order w/ Civil Charges: The County of Henrico (County) has a 911 Training Center. The Training Center is located at 7701 East Parham Road, Henrico, Virginia. The County is an operator of a 250 gallon aboveground storage tank located at the Training Center. The aboveground storage tank contains diesel fuel which is used for heating purposes and to run the emergency generator for the Training Center. The aboveground storage

tank is exempt from certain aboveground storage tank requirements pursuant to 9 VAC 25-91-30. On February 2, 2010, DEQ received notification of a diesel fuel spill in Rocky Branch, which is located near the Henrico County government complex. The County immediately responded to the report and had a contractor mobilize to the site to begin removal and cleanup operations. The discharged diesel fuel was traced back to the 911 Training Center. After further investigation, the County reported that the discharge was caused by the overfilling of the 250 gallon "day" tank, due to a faulty switch. The Training Center has a larger underground storage tank, which periodically fills the aboveground storage tank. The diesel fuel had migrated through secondary containment back to the underground storage tank sumps, filling the sumps, then flowed subsurface under the parking lot via French drains down gradient to a storm water drop inlet which discharges to Rocky Branch. On February 4, 2010, DEO received notification of a fish kill in Rocky Branch. DEQ conducted an investigation of the fish kill and found that the kill extended approximately 0.3 miles and counted 642 dead fish. On March 3, 2010 DEQ issued a Notice of Violation (NOV) to the County for the discharge of oil to state waters and the resulting fish kill. DEQ and the County met several times to discuss resolution of the violation and progress with cleanup operations. On April 23, 2010 the County reported that 5,602 gallons of diesel fuel had been discharged and that 5,477.4 gallons were recovered. On July 15, 2010, DEQ received the County's "Initial Abatement Report/Site Characterization Report" which described the cause, extent and impact of the oil discharge from the Training Center, the remediation activities. The Initial Abatement Report indicated that restoration of the impacted areas was to be completed by June 21, 2010 and the site closed by June 23, 2010. The County took steps to prevent an occurrence of a similar fuel discharge by taking the following action: (1) by temporarily installing two aboveground storage tanks to use while the tank system was being upgraded with a new alarm system, and (2) implementing a notification procedure for responding to malfunctions of the system. The County of Henrico agreed to the Consent Special Order with the Department to address the above described violations. The Order requires that the County pay a civil charge, perform a SEP, pay for the fish kill investigative costs, and fish replacement costs. Civil charge: \$84,030 with a SEP. The SEP the County proposes is to upgrade three petroleum tank systems in the County's administration complex to prevent oil discharges into State Waters.

Lucky's Convenience Stores, Inc., Richmond - Consent Special Order w/ Civil Charges: Lucky's Convenience Stores, Inc.("Lucky's") owns Underground Storage Tanks ("USTs") containing gasoline, kerosene and diesel fuel, all of which are regulated substances, at its Facility on 607 E. Laburnum Avenue in Henrico County, Virginia. On May 28, 2008, DEQ staff conducted an inspection of the Lucky's facility and found improper registration, failure to clean spill catchment basins and maintain submersible turbine pumps, and no documents indicating compliance with flexible piping codes, release detection, or financial assurance. On May 28, 2008, the Department issued a request for corrective action for the issues observed during the May inspection. The corrective action was required to be completed by June 30, 2008. After failing to return to compliance, on November 7, 2008, the Department issued a Warning Letter. The Department mailed a Letter of Agreement (LOA) to Lucky's for signature on January 8, 2009, but the LOA was not signed or returned. On May 8, 2009, the Department issued a Notice of Violation to Lucky's for the violations observed during the May 2008 inspection. On July 13, 2009, DEQ enforcement and compliance staff met with representatives of Lucky's to discuss the violations. Lucky's will be required to submit copies of three months of release detection records; provide documentation of the condition of the flexible piping; and obtain financial assurance. Since signing the proposed Consent Order, Lucky's has corrected the registration form and submitted passing line tightness and monthly tank leak detection records. The cost of the injunctive relief is estimated at \$3,500 for the requirements listed in Appendix A. Civil charge: \$13,600.

American Marine Group, Inc., Norfolk - Consent Special Order with a civil charge: American Marine Group, Inc. ("AMG") provides marine services, including transport and towing, from a facility in Norfolk, Virginia. When not in use, the tugboats, barges and other equipment used by AMG are stored in a boatyard that is adjacent to the facility that accesses the Eastern Branch through an unnamed inlet. Other marine-service providers store vessels and equipment in the same boatyard downstream of the

facility. On Monday, March 1, 2010, DEO received notification of a discharge of diesel fuel in the waters near the facility. The notification indicated that on March 1, 2010, M/V Susan Ann, which was moored in the waters near the facility, was observed lying on its side and had discharged diesel fuel into the water of an unnamed inlet of the Eastern Branch. DEQ staff ("Staff") responded to the notification by conducting a site inspection on March 1, 2010, and observed that AMG representatives were present, and cleanup efforts were underway. Oil-absorbent booms and pads had been deployed and the discharge contained within the inlet. It was noted that AMG had insufficient preventative and cleanup materials available to fully remediate the discharge and called in an oil-response contractor to assist. Staff observed M/V Susan Ann resting in shallow water and listing severely to starboard away from the shoreline. The vessel had been moored in water that was too shallow for its draft and had listed after its keel struck the bottom of the inlet when the tide receded, causing diesel fuel stored in the vessel to discharge through openings in the vessel's deck that had become submerged when the ship listed. Staff observed that substantially all of the diesel fuel had been recovered. It was subsequently determined that, on Friday, February 26, 2010, two AMG employees had relocated M/V Susan Ann (owned by Back River Towing, Inc.), within the confines of the boatyard and secured the tugboat American, which was chartered by AMG, outboard of M/V Susan Ann, both being tied to a barge in the inlet and both parallel to the shore. One of the AMG employees acknowledged having observed M/V Susan Ann listing to starboard on Saturday, February 27, 2010, but did not notify his supervisor. DEQ issued AMG a Notice of Violation ("NOV") on April 6, 2010, for the discharge of petroleum to State waters. An attorney representing AMG responded to the NOV on May 14, 2010, and affirmed that M/V Susan Ann had been moored between the shoreline and the AMG tugboat and had "grounded" when the tide receded causing the vessel to list to the point that water entered the vessel resulting in the list becoming more pronounced. As a consequence, one of the vessel's diesel fuel tanks spilled its contents into the water within the Facility. The letter estimated that one of the fuel tanks holds no more than 400 gallons of diesel fuel and that before the incident the tanks were less than one-third full. The response asserted that the tides in the early morning hours of March 1, 2010, were "higher and lower than usual" and that AMG had responded "diligently to contain the spill and to minimize any effect it may have had on the environment." The response noted further that the inlet on which the facility is located is narrow and restricted, thus inhibiting the ability of the discharged oil to have reached the Elizabeth River. The Consent Special Order ("Order") would require AMG to pay a civil charge in four quarterly installments with the first installment due by January 1, 2011 and to submit an oil discharge contingency plan to prevent future discharges of oil to State waters from AMG operations and to properly contain and clean up a discharge should one occur. Civil charge: \$7,361.

Final FY 2011 Virginia Clean Water Revolving Loan Fund Authorizations and Draft Stormwater Loan Program Guidelines for Public Comment: Title IV of the Clean Water Act requires the yearly submission of a Project Priority List and an Intended Use Plan in conjunction with Virginia's Clean Water Revolving Loan Fund Capitalization Grant application. Section 62.1-229 of Chapter 22, Code of Virginia, authorizes the Board to establish to whom loans are made, the loan amounts, and repayment terms. The next step in this yearly process is for the Board to set the loan terms and authorize the execution of the loan agreements. During the 2010 session, the Virginia General Assembly amended Chapter 22 of the Code of Virginia by adding §62.1-229.4. The new code section further expanded the activities of the Virginia Clean Water Revolving Loan Fund by allowing the State Water Control Board to authorize low interest loans from the Fund for construction of facilities or structures or implementation of best management practices that reduce or prevent pollution of state waters caused by stormwater runoff from impervious surfaces. Further, the legislation authorized the Board to develop guidelines for the administration of those stormwater loans. Staff has developed draft guidelines and is recommending that the Board authorize them for public review and comment.

At its September 2010 meeting, the Board targeted 34 projects totaling \$173,183,129 in loan assistance from available and anticipated FY 2011 resources and authorized the staff to present the proposed funding list for public comment. A public meeting was convened on November 16th. Notices of the meeting were mailed to all loan applicants and advertised in six newspapers across the state. The only comment received during the comment period was from Mr. R. H. Meyers from

Northampton County who provided his understanding that the impetus for the County's application was economic development. He also expressed his opinion that there is a lack of substantiated evidence of groundwater contamination from septic systems in the area. We received subsequent correspondence (after the public notice period) from the Chairman of the Northampton County Board of Supervisors, the Mayor of Cheriton, the Mayor of Cape Charles, and the Director of the Easter Shore Health District confirming the environmental need for the Northampton County project and providing supporting documentation

The staff has conducted initial meetings with the FY 2011 targeted recipients and has finalized the associated user charge impact analyses in accordance with the Board's guidelines. No changes have been made as a result of these meetings and the 2011 funding list remains at 34 projects being recommended for final authorization at a total amount of \$173.183.129.

The loan rates/terms listed below are submitted for Board consideration. The wastewater applications were reviewed in accordance with the Board's guidelines, with a residential user charge impact analysis conducted for each project. This analysis determines the anticipated user charges as a result of the project relative to the affordable rate as a percentage of the applicant's median household income. The rates/terms for the land conservation projects are in accordance with the Board adopted guidelines, which stipulate that interest rates for short term loans (up to ten year terms) will be fixed at 300 basis points (3.0 %) below the prevailing prime rate, which is currently at 3.25%.

Once approved, this information and the approved interest rates will be forwarded to VRA for concurrence and recommendation. VRA will prepare the credit summaries and financial capability analyses on the recipients authorized for FY 2011 funding, looking at their repayment capability and individual loan security requirements. The program sets its VCWRLF ceiling rate on wastewater loans at 1% below the current municipal bond market rate. Since the program with have to leverage this year and sell bonds to fund these projects, we are recommending that the ceiling rate for the FY 2011 wastewater projects not be set until those bonds are sold in the spring of 2011. The ceiling rate will then be established at 1% below the all-in true interest rate on those bonds.

Since the Board's September meeting, Congress has still not finalized the federal SRF appropriation for FY 2011. As such, we are unsure as to whether the appropriation bill will include requirements similar to those newly established in FY2010 regarding green reserve project funding and principal forgiveness. Staff believes that the energy and land conservation projects already included on this list will satisfy any green project reserve requirement that might be included, and at the same time are worthwhile projects to go forward that meet our program criteria. The staff has also analyzed the projects with regard to the program's hardship criteria and will be prepared to work with the Director on providing principal forgiveness to some projects as allowed by previous delegations if it is included in the federal appropriation language.

FY 2011 Proposed Interest Rates and Loan Authorizations

	Locality	Loan Amount	Rates & Loan Terms
1	Rivanna Water & Sewer Auth.	5,200,000	C, 20 years
2	City of Lynchburg	10,100,000	0%, 30 years
3	Upper Occoquan Service Auth.	20,624,210	C, 20 years
4	Alexandria Sanitation Authority	4,900,000	C, 20 years
5	City of Covington	5,733,300	0%, 20 years
6	City of Norfolk	9,300,000	0%, 20 years
7	Craig-New Castle PSA	365,200	0%, 20 years
8	Rivanna Water & Sewer Auth.	4,048,000	C, 20 years
9	Rivanna Water & Sewer Auth.	6,900,000	C, 20 years
10	City of Charlottesville	3,647,680	C, 20 years
11	Western VA Water Authority	12,602,500	C, 20 years
12	Western VA Water Authority	1,500,000	C, 20 years

13	Western VA Water Authority	4,375,000	C, 20 years
14	Western VA Water Authority	6,872,000	C, 20 years
15	•		0%, 20 years
	Town of Crewe	6,794,399	•
16	Northampton County	10,920,746	0%, 20 years
17	Augusta County	2,562,400	0%, 20 years
18	Wythe County	1,742,000	0%, 20 years
19	City of Lynchburg	9,000,000	0%, 20 years
20	Washington County Service Auth.	1,604,126	1%, 20 years
21	Washington County Service Auth.	1,793,607	1%, 20 years
22	Washington County Service Auth.	1,024,613	1%, 20 years
23	Scott County PSA	590,361	0%, 20 years
24	Town of Pulaski	1,284,290	0%, 20 years
25	Coeburn Norton Wise RWTA	11,225,575	0%, 20 years
26	Town of Abingdon	2,124,000	0%, 20 years
27	City of Danville	2,000,000	C, 20 years
28	Shenandoah County	2,095,642	C, 20 years
29	Upper Occoquan Service Auth.	1,876,150	C, 20 years
30	HRSD	4,518,000	C, 20 years
31	Upper Occoquan Service Auth.	2,499,330	C, 20 years
32	Botetourt County	2,700,000	C, 20 years
33	Trust for Public Land	8,000,000	0.25%, 10 years
34	The Nature Conservancy	2,660,000	0.25%, 10 years
	Total Request	173,183,129	C= Ceiling Rate

Draft Guidelines for Stormwater Loan Program: The staff has developed draft guidelines for a new Stormwater Loan Program (attached) in accordance with the legislation passed by the 2010 Virginia General Assembly. The draft guidelines carry forward many of the same principals from the existing wastewater program including the application procedures/timeframe, eligibility, prioritization, and interest rate criteria, while addressing the specific priorities included in the state legislation and the recent federal requirements for green reserve projects and principal forgiveness. Additional incentives are provided for localities that adopt stormwater control programs that include dedicated revenue sources to help manage their programs. The staff has consulted with the Department of Conservation and Recreation during the development process. We anticipate that stormwater projects will become an important part of our program in order to meet the upcoming challenges of TMDL implementation throughout the Commonwealth. At this time we are seeking Board authorization to present the draft guidelines for public review/comment with anticipation of returning to the Board in March for final adoption.

Staff Recommendations:

- (1) Authorize the execution of loan agreements for the projects, loan amounts, interest rates and terms listed above. Loan closing will be subject to receipt of a favorable financial capability analysis report and supporting recommendation from VRA.
- (2) Authorize the staff to present the draft Guidelines for the Stormwater Loan Program to the public for their review and comment.